2021/22

COURSE CATALOGUE, COMPETENCIES AND LEARNING OUTCOMES

UNDERGRADUATE STUDY PROGRAMME OF RADIOLOGIC TECHNOLOGY

Adopted at the 5th session of the Professional Expert Council held on 22 February 2022

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PUBLISHER

University of Split
University Department of Health Studies

EDITORS

- Prof. Stipan Janković, PhD, MD, Head of the UDHS, Head of the Academic Department of Radiologic Technology
- Prof. Davorka Sutlović, PhD, Assistant to the Head for Teaching
- Tatjana Matijaš, mag. rad. techn, lecturer, deputy Head of the Study Programme Department of Radiologic Technology

TECHNICAL SUPPORT

Endica Radić Hozo, PhD
Jadranka Vrsalović, LLM
Jelena Saraga Ljoka, BA in Croatian

TRANSLATOR:

Sonja Koren, MA in English and French

AUTHORS OF TEXTS

Course leaders

COMPETENCIES OF THE UNDERGRADUATE UNIVERSITY STUDY PROGRAMME OF RADIOLOGIC TECHNOLOGY

After completing undergraduate study programme of radiologic technology the students will be fully qualified to work independently or in a team. Upon completion of their studies, the students acquire the following competences:

1. Knowledge

1.1. **Basic knowledge in natural and biomedical sciences**: apply basic knowledge of anatomy, physiology, biochemistry, biology, biophysics, embryology, public health, statistics needed to define, analyse and propose procedures in biomedicine and health.

1.2**. Expert knowledge in radiologic technology**: applly professional knowledge and skills in counseling and choosing appropriate diagnostic procedure, provide health care, apply current health policies and guidelines, and principles of ethics and deontology.

2. Personal skills

2.1. **Problem solving and decision making**: demonstrate observational and critical skills in development and implementation of solutions to practical problems in providing diagnostic procedures, independently apply trenutačne measures for life protection.

2.2. **Communication skills**: provide positive interactions with patients, associates, other health professionals and the general public through oral and written forms of communication.

2.3. **Teamwork skills**: with professional and responsible behaviour make significant contribution to various situations and interprofessional groups, and the work of professional organizations and committees.

3. Professional skills

3.1. **Diagnostic procedures in radiology:** participate in teamwork when performing conventional and digital radiography and tomography, conventional imaging techniques with contrast media; fluoroscopy with targeted radiographic imaging; conventional tomography; ERCP imaging; digital angiography and digital coronography – DSA, and ventriculography - CDSA; fluoroscopy and fluorography with mobile radiographic equipment; mammography; MSCT, dynamic CT and CTA imaging; ultrasound and dynamic Doppler imaging; MR and MRA imaging; functional MR imaging and peform dental radiography independently or in a team with a radiologist; assess image quality and the causes of artifacts in conventional and digital radiography. The special tasks of the radiologic technologist are the admission of patients for diagnostic processing, a brief introduction to their medical history, checking the correctness of referrals and preparing a patient for various diagnostic procedures. The radiologic technologists are able to give valid answers to patients regarding radiation doses of various diagnostic procedures. They are competent to answer questions about the harmful effects of ionizing and non-ionizing radiation on living structures, especially on pregnant women and the phoetus, and the younger patient population, especially girls and young women (radiobiological effects of ionizing and non-ionizing radiation). The radiologic technologists provide emergency interventions within a team in case of adverse reactions to contrast agents or diagnostic interventional or therapeutic procedures, and resuscitation in heart failure (cardiac arrest, etc.).

3.2. **Diagnostic procedures in interventional radiology**: participate in teamwork when performing blood vessel PTA, embolotherapy and coil occlusion, vascular stenting, transcatheter application of cytostatics, fluoroscopy guided fine needle aspiration, MSCT, MRI and ultrasound - guided fine needle aspiration and biopsy, nefrostomy and cysts and abscesses drainage; independently work with the automatic injector, plan and implement procedures and protect the staff and patients during diascopy.

3.3. **Diagnostic procedures in radiotherapy and oncology**: participate in radiotherapy and oncology teamwork for work with telecobalt therapy device, linear accelerator, superficial radiotherapy devices, work with simulator and preparation of instruments and other equipment needed in radiotherapy planning, work on CT for radiation treatment planning, participates in the designing of radiotherapeutic masks, shielding blocks, including lung blocks, making casts (vaginal, extremities) for application of intracavitary radiotherapy and percutaneous isotope therapy, creating splints for children to immobilise the extremities; makes boluses, recording defined radiation fields when planning, making tatoos of central and edge points of the radiation field, enter daily data in patients radiation therapy protocols, control and maintenance of the outlined radiation fields

3. Professional skils

3.4. **Diagnostic procedures in nuclear medicine:** independently prepare radionuclides and participate in labelling radiopharmaceuticals, separate individual doses (or activities) and measure the activities with dose calibrators; participate in taking a patient's medical history, prepare patients for gamma camera imaging (in collaboration with a physician), set the patients into appropriate positions; independently handle NM instrumentation in terms of: setting parameters, taking static, dynamic and SPECT digital images, controlling the image acquisition process, analysing the quality and integrity of the obtained images, changing the gamma camera collimators, processing and printing acquired NM image; independently operate PET/CT devices and applications; use computer at basic operating system level, computer applications (word processing and table calculation), and specific NM programs for acquisition and analysis of digital NM images; participates in in-vitro measurements which requires knowledge of various types of scntillation counters and detectors; create conditions for and participate in the implementation of radionuclide therapy; ensure quality assurance standards in NM departments: daily quality control procedures that radiologic technologists perform independently (e.g. energy calibration of the camera - "peaking", intrinsic or extrinsic assessment of visual field uniformity; weekly, monthly and annual periodic quality control procedures for a number of measurement parameters); actively participate in the program for protection from ionising radiation of staff and patients through proper knowledge of protection principles, use protection, participate in optimisation of radiation protection, and carry out of decontamination measures.

3.5. **Organizational skills:** plan, organise and provide health care in diagnostic procedures based on acquired knowledge and skills applying principles important for independent and team work, cooperate with other stakeholders in the health sector, including participation in the practical training of health staff based on acquired knowledge and skills.

3.6. **Information** skills: use information technology and databases to improve professional knowledge and skills and self-education, analyse the quality of work to develop the professional practice of radiologic technologists responsible for diagnostic procedures in a team.

3.7. **Research skills**: explain scientific foundations of diagnostic procedures, including sufficient understanding of the structure, physiological functions and behaviour of the healthy and the sick as well as the relationship between health condition and physical and social environments, develop quality and evaluate the profession.

4. Independence and responsibility

4.1. **Independence**: demonstrate independence in organization, leadership and management, development of strategies and business plans relevant to the profession

4.2. **Responsibility**: apply legal and ethical principles of the profession in independent and team work; carry out activities related to continuing professional education and contributes to the development of the profession.

COURSE CATALOGUE WITH LEARNING OUTCOMES

Upon completion of the study the students will be able to:

1. Apply basic knowledge of anatomy, physiology, biochemistry, biology, biophysics, embryology, public health, statistics needed to define, analyse and propose procedures in biomedicine and health.
2. Operate within health care team in cases when a multidisciplinary approach is needed; apply acquired knowledge in the field of radiologic technology; assess image quality and the causes of artifacts in conventional and digital radiography. The radiologic technologists are able to give valid answers to patients regarding radiation doses of various diagnostic procedures and implement all protective measures. They are competent to answer questions about the harmful effects of ionizing and non-ionizing radiation on living structures, especially on pregnant women and the phoetus, and the younger patient population, especially girls and young women (radiobiological effects of ionizing and non-ionizing radiation). The radiologic technologists provide emergency interventions within a team in case of adverse reactions to contrast agents or diagnostic interventional or therapeutic procedures, and resuscitation in heart failure (cardiac arrest, etc.).
3. Keep medical records, plan, organise and carry out diagnostic procedures; validate the work plan, analyse the conditions for its implementation and implement the planned activities.
4. Leading the team independently or participate in teamwork when performing conventional and digital radiography and tomography, conventional imaging techniques with contrast media; fluoroscopy with targeted radiographic imaging; conventional tomography; ERCP imaging; digital angiography and digital coronography – DSA, and ventriculography – CDSA.
5. Leading the team independently or participate in teamwork when performing fluoroscopy and fluorography with mobile radiographic equipment; mammography; MSCT, dynamic CT and CTA imaging; ultrasound and dynamic Doppler imaging; MR and MRA imaging; functional MR imaging.
6. Participate in teamwork or independently perform dental radiography.
7. Participate in teamwork when performing blood vessel PTA, embolotherapy and coil occlusion, vascular stenting, transcatheter application of cytostatics, fluoroscopy guided fine needle aspiration, MSCT, MRI and ultrasound - guided fine needle aspiration and biopsy, nefrostomy and cysts and abscesses drainage.
8. Participate in radiotherapy and oncology teamwork in working with telecobalt therapy device, linear accelerator, superficial radiotherapy devices, work with simulator and preparation of instruments and other equipment needed in radiotherapy planning, work on CT for radiation treatment planning.
9. Participates in radiotherapy and oncology teamwork in designing of radiotherapeutic masks, shielding blocks, including lung blocks, making casts (vaginal, extremities) for application of intracavitary radiotherapy and percutaneous isotope therapy, creating splints for children to immobilise the extremities; makes boluses.
10. Participates in radiotherapy and oncology teamwork in recording defined radiation fields when planning, making tatoos of central and edge points of the radiation field, enter daily data in patients radiation therapy protocols, control and maintenance of the outlined radiation fields.

11. Participate in teamwork in preparing radionuclides and labelling radiopharmaceuticals, separate individual doses (activities) and measure the activities with dose calibrators; participate in taking a patient's medical history, prepare patients for gamma camera imaging (in collaboration with a physician), set the patients into appropriate positions.
12. Independently handle NM instrumentation in terms of: setting parameters, taking static, dynamic and SPECT digital images, controlling the image acquisition process, analysing the quality and integrity of the obtained images, changing the gamma camera collimators, processing and printing acquired NM image; independently operate PET/CT devices and applications; use computer at basic operating system level, computer applications (word processing and table calculation), and specific NM programs for acquisition and analysis of digital NM images; participates in in-vitro measurements which requires knowledge of various types of scntillation counters and detectors; create conditions for and participate in the implementation of radionuclide therapy.
13. Ensure quality assurance standards in NM departments: daily quality control procedures that radiologic technologists perform independently (e.g. energy calibration of the camera - "peaking", intrinsic or extrinsic assessment of visual field uniformity; weekly, monthly and annual periodic quality control procedures for a number of measurement parameters); actively participate in the program for protection from ionising radiation of staff and patients through proper knowledge of protection principles, use protection, participate in optimisation of radiation protection, and carry out of decontamination measures (when necessary).
14. Act according to the principles of he professional ethics and legislation.
15. Use information technology and databases to improve professional knowledge and skills

I. and II. SEMESTER – LEARNING OUTCOMES AT THE STUDY LEVEL

KOD	PREDMET	PDR 1	PDR 2	PDR 3	PDR 4	PDR 5	PDR 6	PDR 7	PDR 8	PDR 9	PDR 10	PDR 11	PDR 12	PDR 13	PDR 14	PDR 15
ZSZ634	Informatics and Statistics in Health Care	+														+
ZSZ635	Social and Health Legislation	+													+	
ZSZ604	Basics of Health Care Management	+													+	
ZSZ605	Ethics in Health Care	+													+	
ZSZ606	Physical Training I	+														
ZSZ636	English for Radiologic Technology I	+														
ZSZ608	Health Care Psychology	+														
ZSZ609	Communication Skills	+														
ZSZ610	Hygiene and Epidemiology	+														
ZSZ611	Sociology of Health	+													+	
ZSZ613	Public Health	+														
ZSZ614	Biochemistry	+														
ZSZ615	Biophysics	+														
ZSZ616	Anatomy	+														
ZSZ617	Physiology	+														
ZSZ618	Biology	+														
ZSZ620	Basics of Nursing Care	+														
ZSR601	Radiation Physics and Electronics	+	+	+	+	+					+	+	+		+	+
ZSR602	Introduction to Radiology	+	+	+	+										+	+
ZSR603	Radiological Propedeutics	+	+	+	+										+	+
ZSR604	Radiobiology and Radiation Protection	+	+	+	+	+	+	+			+			+	+	+
ZSR605	Clinical Practice I	+	+	+	+										+	+
ZSR607	Radiological image receptors	+	+	+	+		+								+	+

III. and IV. SEMESTER – LEARNING OUTCOMES AT THE STUDY LEVEL

KOD	PREDMET	PDR 1	PDR 2	PDR 3	PDR 4	PDR 5	PDR 6	PDR 7	PDR 8	PDR 9	PDR 10	PDR 11	PDR 12	PDR 13	PDR 14	PDR 15
ZSZ621	Introduction to Scientific Work	+														+
ZSZ622	Use of Science Technology	+														+
ZSZ623	Physical Training II	+														
ZSZ637	English for Radilogic Technology II	+														
ZSZ625	Pathophysiology	+														
ZSZ626	Pathology	+														
ZSZ627	Microbiology and Parasitology	+														
ZSZ628	Pharmacology	+														
ZSR606	Radiological Devices and Equipment	+	+	+	+	+	+		+				+		+	+
ZSR608	Radiological Vocabulary and Standards	+														
ZSR609	Skeletal Radiography	+	+	+	+		+								+	+
ZSR610	Conventional Radiological Methods	+	+	+	+		+								+	+
ZSR612	Theories of Imaging	+	+	+	+	+	+						+		+	+
ZSR613	Radiologic Anatomy and Pathology	+		+	+	+	+						+			+
ZSR614	Internal Medicine	+														
ZSR616	Surgery and Traumatology	+	+													
ZSR617	Contrast Media	+	+	+	+	+		+							+	
ZSR618	Computers in Radiology	+	+	+	+	+	+	+	+				+			+
ZSR619	Clinical Practice II		+	+	+	+	+								+	+
ZSR611	Radiological Methods in Special Working Fields	+	+	+	+										+	
ZSR635	Application of Radiography in Other Fields	+			+	+										+

V. and VI. SEMESTER – LEARNING OUTCOMES AT THE STUDY LEVEL

KOD	PREDMET	PDR 1	PDR 2	PDR 3	PDR 4	PDR 5	PDR 6	PDR 7	PDR 8	PDR 9	PDR 10	PDR 11	PDR 12	PDR 13	PDR 14	PDR 15
ZSZ630	Emergency Medicine	+														
ZSR620	Ultrasound Diagnostics	+				+										+
ZSR621	Computerised Tomography	+	+	+		+									+	+
ZSR622	DSA	+	+	+	+										+	+
ZSR623	MRI	+	+	+		+									+	+
ZSR624	New Technologies in Radiology	+	+	+	+	+	+	+							+	+
ZSR626	Interventional Radiology	+	+	+				+							+	+
ZSR627	Nuclear Medicine	+	+	+								+	+	+	+	+
ZSR628	Radiotherapy and Oncology	+	+	+		+			+	+	+				+	+
ZSR629	Equipment and Workflow Quality Control				+	+	+	+	+					+	+	+
ZSR633	Clinical Practice III		+	+	+	+	+	+							+	+
ZSR634	Bachelor's Thesis		+													+
ZSR625	Multiplanar Reconstruction Images of Body Structures		+	+		+									+	+
ZSR630	Nuclear Medicine Instrumentation	+	+	+								+	+	+	+	+
ZSR631	Radiotherapy Planning	+	+	+					+	+	+				+	+
ZSR632	Radiotherapy Devices	+	+	+					+						+	+

MANDATORY AND ELECTIVE COURSES

LIST OF COURSES							
Year of study: 1.							
Semester: I. i II.							
STATUS	CODE	COURSE	NUMBER OF HOURS PER SEMESTER				ECTS
			L	S	E	F	
Mandatory	ZSZ634	Informatics and Statistics in Health Care	10	10	20	0	2
	ZSZ635	Social and Health Legislation	15	15	0	0	2
	ZSZ604	Basics of Health Care Management	10	4	5	0	1
	ZSZ605	Ethics in Health Care	20	10	0	0	1,5
	ZSZ606	Physical Training I	0	0	0	38	1,5
	ZSS642	English for Radiologic Technology I	0	30	0	0	1,5
	ZSZ608	Health Care Psychology	14	12	18	0	2
	ZSZ609	Communication Skills	12	0	0	18	2
	ZSZ610	Hygiene and Epidemiology	30	20	0	5	3
	ZSZ611	Sociology of Health	20	12	0	0	1,5
	ZSZ613	Public Health	15	5	0	0	1
	ZSZ614	Biochemistry	20	10	0	0	2
	ZSZ615	Biophysics	20	5	0	0	2
	ZSZ616	Anatomy	26	20	40	0	3
	ZSZ617	Physiology	30	7	0	10	3
	ZSZ618	Biology	20	10	0	0	2
	ZSZ620	Basics of Nursing Care	15	4	0	0	1
	ZSR601	Radiation Physics and Electronics	30	10	30	0	4
	ZSR602	Introduction to Radiology	15	15	40	0	4
	ZSR603	Radiological Propedeutics	10	10	10	0	2
	ZSR604	Radiobiology and Radiation Protection	20	15	18	0	3,5
	ZSR605	Clinical Practice I	5	25	215	0	11
	ZSR607	Radiological Image Receptors	20	10	50	0	3,5
	TOTAL		377	259	426	71	60

Key
L – lectures
S – seminars
E – exercises
F – field practice
*Physical culture – students have 38 hours of field practice in the first and second year.

LIST OF COURSES							
Year of study: 2.							
Semester: III i IV							
STATUS	CODE	COURSE	NUMBER OF HOURS PER SEMESTER				ECTS
			L	S	E	F	
Mandatory	ZSZ621	Introduction to Scientific Work	6	10	12	0	1,5
	ZSZ622	Use of Science Technology	10	12	0	0	1,5
	ZSZ623	Physical Training II	0	0	0	38	1,5
	ZSZ643	English for Radiologic Technology II	0	30	0	0	1,5
	ZSZ625	Pathophysiology	30	8	0	0	2
	ZSZ626	Pathology	30	8	0	0	2
	ZSZ627	Microbiology and Parasitology	20	10	0	0	2
	ZSZ628	Pharmacology	28	8	0	0	2
	ZSR606	Radiological Devices and Equipment	25	10	85	0	6
	ZSR608	Radiological Vocabulary and Standards	8	10	0	0	1
	ZSR609	Skeletal Radiography	50	0	130	0	10
	ZSR610	Conventional Radiological Methods	25	5	35	0	3
	ZSR612	Theories of Imaging	30	5	35	0	4
	ZSR613	Radiological Anatomy and Pathology	22	5	43	0	4
	ZSR614	Internal Medicine	20	10	5	0	2
	ZSR616	Surgery and Traumatology	20	10	5	0	2
	ZSR617	Contrast Media	8	0	12	0	1
	ZSR618	Computers in Radiology	10	10	35	0	3
	ZSR619	Clinical Practice II	5	20	145	0	8
	TOTAL (Mandatory courses)		347	171	542	38	58
Elective	ZSR611	Radiological Methods in Special Working Fields	14	0	25	0	2
	ZSR635	Application of Radiography in Other Fields	10	8	11	10	2
	1 elective course is mandatory						

LIST OF COURSES							
Year of study: 3							
Semester: V i VI							
STATUS	CODE	COURSE	NUMBER OF HOURS PER SEMESTER				ECTS
			L	S	E	F	
Mandatory	ZSZ630	Emergencies in Medicine	18	0	25	0	2
	ZSR621	Ultrasound Diagnostics	6	4	10	0	1
	ZSR621	Computerised Tomography	25	10	50	0	5
	ZSR622	DSA	17	10	25	0	3
	ZSR623	MRI	25	10	50	0	5
	ZSR624	New Technologies in Radiology	15	10	35	0	3
	ZSR626	Interventional Radiology	17	10	25	0	3
	ZSR627	Nuclear Medicine	30	20	60	0	6
	ZSR628	Radiotherapy and Oncology	30	20	60	0	6
	ZSR629	Equipment and Workflow Quality Control	10	6	20	0	2
	ZSR633	Clinical Practice III	5	20	95	0	6
	ZSR634	Bachelor's Thesis	0	0	320	0	14
	TOTAL (Mandatory courses)		198	120	775	0	56
Elective	ZSR625	Multiplanar Reconstruction Images of Body Structures	15	10	10	0	2
	ZSR630	Nuclear Medicine Instrumentation	15	10	10	0	2
	ZSR631	Radiotherapy Planning	15	10	10	0	2
	ZSR632	Radiotherapy Devices	15	10	10	0	2
	2 elective courses are mandatory						

EXAM AND COURSE ENTRY REQUIREMENTS

CODE	COURSE	COURSE ENTRY REQUIREMENTS	EXAM ENTRY REQUIREMENTS
ZSZ634	Informatics and Statistics in Health Care	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ635	Social and Health Legislation	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ604	Basics of Health Care Management	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ605	Ethics in Health Care	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ606	Physical Training I	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ636	English for Radiologic Technology I	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ608	Health Care Psychology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ609	Communication Skills	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ610	Hygiene and Epidemiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ611	Sociology of Health	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ613	Public Health	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ614	Biochemistry	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ615	Biophysics	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ616	Anatomy	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ617	Physiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ618	Biology	-	Odslušana nastava i seminari

ZSZ620	Basics of Nursing Care	-	In accordance with the Ordinance on the Study and System of Studying
ZSR601	Radiation Physics and Electronics	-	In accordance with the Ordinance on the Study and System of Studying
ZSR602	Introduction to Radiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR603	Radiological Propedeutics	-	In accordance with the Ordinance on the Study and System of Studying
ZSR604	Radiobiology and Radiation Protection	-	In accordance with the Ordinance on the Study and System of Studying
ZSR605	Clinical Practice I	-	In accordance with the Ordinance on the Study and System of Studying
ZSR607	Radiological Image Receptors	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ621	Introduction to Scientific Work	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ622	Use of Scientific Technology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ623	Physical Training II	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ637	English for Radilogic Technology II	Passed English for Radiologic Technology I	In accordance with the Ordinance on the Study and System of Studying
ZSZ625	Pathophysiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ626	Pathology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ627	Microbiology with Parasitology	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ628	Pharmacology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR606	Radiological Devices and Equipment	-	In accordance with the Ordinance on the Study and System of Studying
ZSR608	Radiological Vocabulary and Standards	-	In accordance with the Ordinance on the Study and System of Studying
ZSR609	Skeletal Radiography	Passed Anatomy	In accordance with the Ordinance on the Study and System of Studying

ZSR610	Conventional Radiological Methods	-	In accordance with the Ordinance on the Study and System of Studying
ZSR612	Theories of Imaging	-	In accordance with the Ordinance on the Study and System of Studying
ZSR613	Radiological Anatomy and Pathology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR614	Internal Medicine	-	In accordance with the Ordinance on the Study and System of Studying
ZSR616	Surgery and Traumatology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR617	Contrast Media	-	In accordance with the Ordinance on the Study and System of Studying
ZSR618	Computers in Radiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR619	Clinical Practice II	Passed Clinical skills I	In accordance with the Ordinance on the Study and System of Studying
ZSR611	Radiological Methods in Special Working Fields	-	In accordance with the Ordinance on the Study and System of Studying
ZSR635	Application of Radiography in Other Fields	-	In accordance with the Ordinance on the Study and System of Studying
ZSZ630	Urgentna stanja u medicini / Emergency conditions in medicine	-	In accordance with the Ordinance on the Study and System of Studying
ZSR620	Emergency Medicine	Completed lectures and exercises in Radiological devices and equipment	In accordance with the Ordinance on the Study and System of Studying
ZSR621	Ultrasound Diagnostics	Completed lectures and exercises in Radiological devices and equipment	In accordance with the Ordinance on the Study and System of Studying
ZSR622	DSA	Completed lectures and exercises in Radiological devices and equipment	In accordance with the Ordinance on the Study and System of Studying
ZSR623	MRI	Completed lectures and exercises in Radiological devices and equipment	In accordance with the Ordinance on the Study and System of Studying
ZSR624	New Technologies in Radiology	Passed exam Computers in radiology	In accordance with the Ordinance on the Study and System of Studying
ZSR626	Interventional Radiology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR627	Nuclear Medicine	-	In accordance with the Ordinance on the Study and System of Studying

ZSR628	Radiotherapy and Oncology	-	In accordance with the Ordinance on the Study and System of Studying
ZSR629	Equipment and Workflow Quality Control	-	In accordance with the Ordinance on the Study and System of Studying
ZSR633	Clinical Practice III	Passed Clinical skills II	In accordance with the Ordinance on the Study and System of Studying
ZSR634	Bachelor's Thesis	-	In accordance with the Ordinance on the Study and System of Studying
ZSR625	Multiplanar Reconstruction Images of Body Structures	Completed lectures and passed exams of the previous year of study	In accordance with the Ordinance on the Study and System of Studying
ZSR630	Nuclear Medicine Instrumentation	-	In accordance with the Ordinance on the Study and System of Studying
ZSR631	Radiotherapy Planning	-	In accordance with the Ordinance on the Study and System of Studying
ZSR632	Radiotherapy Devices	-	In accordance with the Ordinance on the Study and System of Studying

CURRICULA OF MANDATORY AND ELECTIVE COURSES

NAME OF THE COURSE	Informatics and Statistics in Health Care					
Code	**ZSZ634**	Year of study	1			
Course teacher	Antonela Matana, PhD, Assistant Professor	Credits (ECTS)	2			
Associate teachers	-	Type of instruction (number of hours)	L	S	E	T
			10	10	20	
Status of the course	Mandatory	Percentage of application of e-learning	20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements.
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing this course, students will be able to: - Describe and explain the basic concepts of informatics and health information systems; - Explain and apply computational techniques in the process of health care; - Select the relevant databases applicable to the process of health care and for studying and research; - Apply information technology in all communication processes in healthcare institutions; - Use text processing and tabular data processing software, creating documents, presenting tabular data; - Use medically oriented search engines, browse medical literature in the Medline database, use Boolean operators for searching medical content on the Internet; - Independent creation of databases - Use research methodology and statistical methods and procedures in medicine - Understand the concepts of measurements in research; - Explain the different ways of presenting the data collected in the research; - Explain and demonstrate basic statistical definitions.

Course content broken down in detail by weekly class schedule (syllabus)	Format of instruction	Class unit	Class hour
	L,S,E	The basic concepts of informatics and its importance for the development of knowledge and improvement of professional practice	5
	L,S,E	Hardware and software	5
	L,S,E	System software, application software, user software	5
	L,S,E	Data types, data analysis in research. Sample and population. Estimation of population parameters Empirical distributions. Fundamentals of statistical inference.	5
	L,S,E	Basic forms of computer application in database search with the aim of learning and research (Medline database)	5
	L,S,E	Healthcare information systems: principles and levels	5
	L,S,E	Application of informatics in improving the healthcare processes.	5
	L,S,E	Application of information technology in all communication processes in health care institutions.	5

Format of instruction	☒ lectures	☐ independent assignments

	☒ seminars and workshops ☒ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1.5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Written exam	30	75
Seminar essay	10	25
Total	**40**	**100**

PERFORMANCE AND GRADE RATIO

Grading (%)	Criteria	Grades
60-69.9	meets the minimum criteria	sufficient (2)
70-79.9	average success	good (3)
80-89.9	above-average success	very good (4)
90-100	outstanding success	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
Kern J, Petrovečki M, urednici. Medicinska informatika. Zagreb: Medicinska Naklada; 2009.		
B.Petz, Osnovne statističke metode za nematematičare, Naklada Slap, Jastrebarsko, 1997		

Optional literature (at the time of submission of study programme proposal)

1. van Bemmel JH, Musen MA (eds). Handbook of Medical Informatics. Heidelberg: Springer-Verlag, 1997.
2. Coiera E. Guide to health informatics. 2. izd. London: Arnold; 2003.
3. Shortliffe E, Cimino JJ, urednici. Biomedical Informatics: Computer Applications in Health Care and Biomedicine. New York: Springer; 2006.
4. Somek, M. Skripta iz informatike. Zagreb, Zdravstveno veleučilište, e-stranice Katedre za informatiku, 2010.
5. Ferenczi E, Muirhead N. Doktor u jednom potezu: Statistika i epidemiologija. Zagreb: Medicinska naklada; 2012.

Quality assurance methods that ensure the acquisition of exit competences

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

Other (as the proposer wishes to add)

-

NAME OF THE COURSE	Social and Health Legislation					
Code	**ZSZ635**	Year of study	1.			
Course teacher	Jozo Čizmić, full professor tenure	Credits (ECTS)	2.			
Associate teachers	Nina Mišić Radanović, assistant professor	Type of instruction (number of hours)	L	S	E	T
			15	15		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After listening to lectures, independent learning and passing the exam, students will: - Recognize and connect the concepts and basic contents of health law - Understand the basics of health law. - Identify and clarify the basic criteria of legal responsibility of health professionals, rights and obligations of health professionals in performing their activities. - Clarify evaluation of healthcare activities - Explain the work and structure of professional chambers. - Understand and explain the position of the health worker in relation to disciplinary, civil and criminal liability. - Recognize and apply the fundamental rights of patients at work.

Course content broken down in detail by weekly class schedule (syllabus)

L/S	The concept and content of health law, the relationship to other scientific disciplines and the principles of health care.	3/3
L/S	The concept of health care and social care , health care measures, levels of health care, content and organizational forms of health care, health care institutions	2/2
L/S	Rights and obligations of health professionals in performing activities (Providing and denying assistance; Mutual relations between workers and patients; Appeal of conscience; Business secret; Obligation to report; Keeping medical records; Choosing another doctor; Searching for a doctor; Health professionals as witnesses and experts).	2/2
L/S	Quality assurance of the provided health service (Professional training; Professional supervision over the work of health workers; Professional chambers).	2/2
L/S	Chambers of Health Workers (Obligation to associate in the Chamber; Exemptions from mandatory association in the Chamber; Public powers of the Chamber; Affairs of the Chamber; Bodies of the Chamber; Supervision of the Chamber; Cooperation of the Chamber with the Ministry of Health and with other bodies; Notification of the Chamber; Payment of membership fees and other financial obligations of members of the Chamber).	2/2
L/S	Disciplinary liability of health care workers (Disciplinary violations; Serious and minor disciplinary violations; Disciplinary bodies; Disciplinary measures; Money Fine; Initiation of disciplinary proceedings; Appropriate application of the law; Statute of limitations; Misdemeanor liability), criminal and civil liability,	2/2
L/S	Fundamental rights of patients.	2/2

Format of instruction	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning.

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
Class attendance		Research		Practical training		
Experimental work		Report				
Essay		Seminar essay		(Other)		
Tests		Oral exam		(Other)		
Written exam	2	Project		(Other)		

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Written exam	20	100
Total	**20**	**100**

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
Udžbenik *Osnove zdravstvenog prava*, autori; Jozo Čizmić i Ljubica Žunić, Split 2014, web knjižara Redak		
BABIĆ, T. – ROKSANDIĆ, S., *Osnove zdravstvenog prava*, Zagreb, 2006.		
ČIZMIĆ, J., *Pravni aspekti medicinske dokumentacije*, «Pravo i porezi», godina XVI., 2007., br. 10., str. 3.-18.		
ČIZMIĆ, J., *Pojam, izvori i načela medicinskog prava*, «Pravo i porezi», god. XVI., 2007., br. 6, str. 25.-34.		
BOŠKOVIĆ, Z., *Medicina i pravo*, Zagreb, 2007.		
Zbornik radova *Liječnička pogreška – medicinski i pravni aspekti*, zbornik radova, urednici JANKOVIĆ, S. – ČIZMIĆ, J., Split, 2007.		
Zakon o kvaliteti zdravstvene zaštite, NN br. 118/18		
Zakon o zdravstvenoj zaštiti, NN br. 100/18, 125/19, 147/20		
Kodeks medicinske etike i deontologije, NN br. 55/08, 139/15		
Podzakonski propisi i propisi autonomnog (staleškog) prava.		
Zakon o radiološkoj i nuklearnoj sigurnosti, NN br. 141/13, 39/15, 130/17, 118/18, 21/22		

	Zakon o zaštiti od neionizirajućih zračenja, NN br. 91/10, , 114/18		
	Zakon o sestrinstvu, NN br. 121/03, 117/08, 57/11		
	Zakon o fizioterapeutskoj djelatnosti, NN br. 120/08.		
	Zakon o primaljstvu, NN br. 120/08, 145/10		
	Zakon o liječništvu, «Narodne novine», broj 121/03, 117/08		
	Zakon o zaštiti prava pacijenata, NN br. 169/04, 37/08		
Optional literature (at the time of submission of study programme proposal)	HERVEY, T. – McHALE, J. V., *Health Law and the European Union*, Cambridge, 2004. LAUFS-UHLENBRUCK, *Handbuch des Arztrechts*, Munchen, 2002. DEUTSCH-SPICKHOFF, *Medizinerecht*, Berlin, 2003. STAUCH, M. – WHEAT, K., *Sourcebook on Medical Law*, London-Sydney, 1999., RADIŠIĆ, J., *Medicinsko pravo*, Beograd, 2004. KLARIĆ, P., *Odgovornost za štete nastale uporabom medicinskih tehničkih uređaja,* Pravo u gospodarstvu, 4/2002. PETRIĆ, S., *Građanskopravna odgovornost zdravstvenih djelatnika*, Zbornik PF Sveučilišta u Rijeci, 2005/vol 26. br. 1., str. 81.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Basics of Health Care Management					
Code	**ZSZ604**					
Study programme	Common	Year of study	1st			
Course teacher	Dejan Kružić, PhD, Full professor tenure	Credits (ECTS)	1,0			
Associate teachers	Ana Juras, PhD, Research associate Ante Mihanović, PhD, Senior lecturer	Type of instruction (number of hours)	L	S	E	T
			10	4	5	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION		
Consultation hours	Consultation hours:: Continuously during the turnus/rotation, inquiry by e-mail or in person. Outside of turnus/rotation, inquiry by e-mail. E-mail: dejan.kruzic@efst.hr	
Course enrolment requirements and entry competences required for the course	No requirements	
Course objectives	Introduce students with basic concepts and available methods and tools of management and leadership in healthcare. Acquired knowledge should enable students to understand organizational, management and leadership processes in healthcare and healthcare organizations.	
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. Critically consider and evaluate management concepts and theories in the context of health and health organizations; 2. Propose to the current situation an adequate organizational structure, organizational culture and manner of planning in the health organization; 3. Propose to the current situation an adequate approach and methods of workforce management in the health organization; 4. Critically analyse various interpersonal processes, dynamics and communication in teamwork and propose an adequate leadership style in health organization; 5. Propose to the current situation adequate methods and tools of control, especially quality control in the health organization; 6. Critically consider work situations in the health organization and propose the application of adequate principles and methods of ethical management.	
Course content broken down in detail by weekly class schedule (syllabus)	– Conceptual definition of management. Basic principles, theories and functions of management. Application of management in the context of health and healthcare organizations. The importance of applying ethics in the management of healthcare organizations. – Planning as a function of management. Implementation of the planning function in healthcare organizations. – Organizing as a function of management. Implementation of the organizing function in health organizations. – Staffing as a function of management. Implementation of the staffing function in healthcare organizations. – Leadership as a function of management. Implementation of the leadership function in health organizations. – Control as a function of management. Implementation of the control function in health organizations.	
Format of instruction	☒ lectures	☒ independent assignments

	☒ seminars and workshops ☒ exercises ☐ *on line* in entirety ☒ partial e-learning ☐ field work	☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	In accordance to Rules of studying and Deontological code for USSM students. Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0,20	Research		Practical training	0,20
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	0,60	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Regular class attendance:

1. lectures - minimum 70% of all lectures,
2. seminars 70% and exercises 80%,
3. active participation on classes.

Evaluation indicators	Success (points)	Share in overall grade (%)
Attendance and activity on lectures and seminars (for 100% attendance)	2	10
Written exam	14	70
Practical training	4	20
Total	**20**	**100**

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Juras, A. (2021). *Osnove menadžmenta u zdravstvu*, Sveučilište u Splitu, SOZS, Split.		
	Buble, M. (2009). *Menadžment*. Ekonomski fakultet. Sveučilište u Splitu, selected chapters.		
	Lectures' and exercises' materials		

Optional literature (at the time of submission of study programme proposal)	Kalauz, S. (2014). *Organizacija i upravljanje u zdravstvenoj njezi*. Medicinska naklada, Zagreb. Murray, E. (2017). *Nursing leadership and management: For patient safety and quality care*. FA Davis Company, Philadelphia, SAD. Walshe, K., Smith, J. (Eds.). (2011). *Healthcare management*. McGraw-Hill Education, UK.
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation

Other (as the proposer wishes to add)	

NAME OF THE COURSE	Ethics in Health Care					
Code	**ZSZ605**	Year of study	1.			
Course teacher	Ana Ćurković, PhD, Assistant professor	Credits (ECTS)	1.5			
Associate teachers	Ana Jeličić, PhD, Assistant professor	Type of instruction (number of hours)	L	S	E	T
			20	10		
Status of the course	Mandatory	Percentage of application of e-learning	Under 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: - explain the concept of ethics as a philosophical discipline and its historical development, - distinguish ethics from morality, - describe and explain the history of health ethics, - describe, explain and apply the principles of health ethics, - describe, explain and apply the code of ethics, - describe, explain and take a critical stance in various ethical dilemmas in health practice, - explain the models of ethical decision-making in health practice, - explain the importance of professional secrecy, - to promote and respect the rights of man, child and patient, - analyze and evaluate individual cases and situations, - adopt ethical values, - make, accept and face, deal with, one's own ethical and moral decisions and the consequences of those decisions in the context of a sense of personal responsibility and duty.

Course content broken down in detail by weekly class schedule (syllabus)

Tipe of instruction	Subject	Number of hours
L	History and definition of ethics, ethics as a philosophical discipline: the foundation of ethics, the meaning of the term, the subject of ethics, ethics and morality	1
L	Object and subject of ethics: man as a person - human dignity, human rights, value and good - evil, conscience and guilt	2
L	Bioethics: history, concept, meaning, application, role, principles, topics and problems	2
L	Introduction to health ethics, medical ethics: history, concept, characteristics, areas	2
L/S	Ethics and science: ethics in scientific research	1/1
L/S	Ethics and fundamental human rights (equality and respect, discrimination, violation of patients' rights, right to decide)	2/2
L	Ethics and communication in medicine (communication with colleagues, communication with the patient, models of the relationship with the patient)	2
L/S	Confidentiality of information and professional secrecy	2/2
L/S	Ethical aspects of informed consent, patient education, informed choice	2/2
L/S	Ethics committees and codes of ethics of health professions	2/1

	L/S	Ethics of care, palliative care, ethical issues related to the end of life and death	2/2

Format of instruction	☒lectures ☒seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.30	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1.20	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Written exam	40	80
Practical training	10	20
Total	**50**	**100**

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
Etika u: Beričić, B. Filozofija; sažeto e-izdanje. Ibis grafika Zagreb 2012. (str. 127.-153.)		
Čović, A, Pojmovna razgraničenja: moral, etika, medicinska etika, bioetika, integrativna bioetika // Bioetika i dijete : Moralne dileme u pedijatriji / Čović, Ante ; Radonić, Marija (ur.). Zagreb: Pergamena ; Hrvatsko društvo za preventivnu i socijalnu pedijatriju, 2011. str. 11-24		
Tom L. Beauchamp, Načela u bioetici. Društvena istraživanja : časopis za opća društvena pitanja, Vol. 5 No. 3-4 (23-24), 1996. str. 533-544		
Svjetsko liječničko udruženje. Priručnik medicinske etike. Medicinska naklada Zagreb 2010. (str. 36.-61., 82.-93.)		
Frković A. Medicina i bioetika. Pergamena Zagreb 1010. (str. 24,-27,, 129.-144., 152.-167.)		
Švajger A. Medicinska etika: Priručno štivo. Sveučilište u Zagrebu, Medicisnki fakultet. Zagreb 1995. (str. 67.-75.)		
Talanga, J. Odnos liječnika i pacijenta prema medicinskoj etici. Bogoslovska smotra, Vol. 76 No. 1, 2006. str. 47-59		

	Pozaić V. Teološki vidici liječničke tajne. Obnov. Život (56) 4 (2001). str. 437-450		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Physical Culture I					
Code	**ZSZ606**	Year of study	1			
Course teacher	Željko Kovačević, PhD Assistant Professor	Credits (ECTS)	1,5			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			3	8	14	38
Status of the course	Mandatory	Percentage of application of e-learning				

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course students will: - Harmonize and improve physical and spiritual health - Manage and improve the quality of healthy living

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Class unit	Class hour
T	Framework program; football, handball, volleyball, athletics, basketball, swimming	10
T	Special program; badminton, indoor football, beach volleyball, hiking, table tennis, water polo	10
T	Custom program: for students with disabilities	10
T	Elective programs for the competition	8

Format of instruction

☐ lectures ☐ seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning X field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)

Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance	1,5	Research		Practical training	
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam		(Other)	
Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Class attendance	100	100
Total	**100**	**100**

PERFORMANCE AND GRADE RATIO

Grading (%)	Criteria	Grades
60-69.9	meets the minimum criteria	sufficient (2)
70-79.9	average success	good (3)

	80-89.9	above-average success	very good (4)
	90-100	outstanding success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Mišigoj Duraković M.tjelesna aktivnost i zdravlje. Zagreb;Kineziološki fakultet; 1999		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	English for Radiologic Technology I					
Code	ZSR636	Year of study	1.			
Course teacher	Sonja Koren, MA, Senior lecturer	Credits (ECTS)	1,5			
Associate teachers	/	Type of instruction (number of hours)	L	S	E	T
				30		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course students will be able to: - develop language skills of speaking, listening, reading, and writing, - find relevant information, and formulate the key idea, - recognize and explain medical terminology in the field of radiologic technology, - present topics in their professional field, - develop communication skills.

Course content broken down in detail by weekly class schedule (syllabus)

S1.	Introduction	2
S2.	Suffixes, prefixes, and terminology	2
S3.	Structural organization of the body	2
S4.	The skeletal system	2
S5.	Bones	2
S6.	Joints	2
S7.	The circulatory system	2
S8.	The urinary system	2
S9.	The nervous system	2
S10.	The digestive system	2
S11.	Stress	2
S12.	Research Studies and Articles	2
S13.	Epidemiology	2
S14.	Presentations of seminar papers	2
S15.	Presentations of seminar papers	2

Format of instruction		
	☐ lectures x seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	In accordance to Rules of studying and Deontological code for USSM students.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,45	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1,05	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Krišković A. Engleski jezik 1. Medicinski fakultet Sveučilišta u Rijeci, Rijeka 2011., skripta		
	Glendinning, E.H., Howard, R. *Professional English in Use - Medicine*. Cambridge: Cambridge University Press; 2007 (selected chapters)		
	Chabner DE. *The Language of Medicine*. 8th edition. St. Louis: Saunders Elsevier; 2007		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Health Care Psychology					
Code	ZSZ608	Year of study	1.			
Course teacher	Vesna Antičević, PhD, Associate professor	Credits (ECTS)	2			
Associate teachers	Slavica Kozina, PhD, Associate professor Varja Đogaš, PhD, Assistant professor Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			14	12	18	
Status of the course	Mandatory	Percentage of application of e-learning	To 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	1. Introducing students to basic knowledge about the impact of psychological factors on health and illness, as well as the impact of illness and physical disorders on the development of psychological problems 2. To introduce students to the possibilities of applying psychological methods and techniques in health care, diagnosis, treatment and rehabilitation of diseases. 3. To demonstrate to students the application of interviews and communication skills on patients with various diseases
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will: - recognize and understand the importance of psychology in health care, - recognize and understand the characteristics of stress and adopt ways of coping with stress, - recognize and understand the connection between physical illnesses and mental states and the influence of mental states on the occurrence of illness, - recognize the psychosocial manifestations of chronic diseases, - recognize positive and negative health behaviors, - know the psychological difficulties of patients in the hospital, - recognize psychological difficulties related to pregnancy and childbirth, - know the psychological difficulties and interventions in rehabilitation processes after the loss of bodily functions - know the techniques of psychological care in the health professions - recognize the applicability of communication principles in contact with patients

Course content broken down in detail by weekly class schedule (syllabus)

Form of teaching	Topics	Student hours
L+S+E	Understanding the importance of psychology in health care,	2+2+3
L+S+E	History of health psychology, Health psychology and health behavior, Psychological healthcare	2+2+3
L+S+E	Physical illness and mental conditions Psychological needs in diseases	2+2+3
L+S+E	Psychological reactions to loss of bodily functions Qualities for psychological care	2+2+3
L+S+E	Psychological difficulties of patients in hospital Models of psychological care	2+2+3
L+S+E	Stress and physical health Strategies for coping with stress	2+2+3
L+S+E	Psychological manifestations of pregnancy and childbirth Psychological care skills	1+0+0
L+S+E	Psychological care in health professions Knowledge of psychological care	1+0+0

Format of instruction	☐x lectures ☐x seminars and workshops ☐x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐x independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
Class attendance		Research		Practical training		
Experimental work		Report				
Essay		Seminar essay	0,14	(Other)		
Tests		Oral exam		(Other)		
Written exam	1,86	Project		(Other)		

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Written exam	40	93,02
Seminar essay (presentation…)	3	6,98
Total	**43**	**100**

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Havelka Meštrović A., Havelka, M. (2020). Zdravstvena psihologija. Naklada Slap. Jastrebarsko, 1998.		
	Class materials		

Optional literature (at the time of submission of study programme proposal)	Priest, H. (2014). Uvod u psihološku njegu u sestrinstvu i zdravstvenim strukama Marks, D. F., Murray, M., Evans, B., Estacio, E. V. (2011). Health Psychology. SAGE Publications Inc.
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Communication Skills					
Code	**ZSZ609**	Year of study	1.			
Course teacher	Vesna Antičević, PhD Associate professor	Credits (ECTS)	2			
Associate teachers	Endica Radić Hozo, PhD	Type of instruction (number of hours)	L	S	E	T
			12	0	18	
Status of the course	Mandatory	Percentage of application of e-learning	To 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able: - to explain the basic laws of interpersonal communication, - to understand the criteria for the division of communication according to the type and purpose of communication, - to understand and explain the basics of information (diagnostic) communication, - to understand and explain the basics of therapeutic communication, - to improve basic communication skills, - to develop complex communication skills for work in health care, - to identify and resolve barriers to communication, - to manage communication skills with people with disabilities and different ages, - to identify and demonstrate basic barriers to communication with the patient and family member; - to recognize and resolve simple complaints in relation to the patient and family members.

Course content broken down in detail by weekly class schedule (syllabus)

	Topic	Student hours
L+E	Introduction to communication skills	2+3
L+E	Information communication and interview technique Therapeutic communication	2+3
L+E	Communication skills, abilities and prejudices Complex communication skills: Active listening and emaphic listening	2+3
L+E	Assertiveness and communication with people with limited communication skills	2+3
L+E	Communication with people of different ages	2+3
L+E	Breaking bad news and griefing	2+3

Format of instruction	x☐ lectures ☐ seminars and workshops x☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the*	Class attendance	0,14	Research		Practical training	

<table>
<tr><td rowspan="4">proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
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<table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Attendance and activity on lectures and seminars (for 100% attendance)</td><td>3</td><td>6,98</td></tr>
<tr><td>Written exam</td><td>40</td><td>93,02</td></tr>
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<tr><td>60-69,9</td><td>meets the minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
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</td></tr>
<tr><td rowspan="3">Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Lučanin, D., Despot Lučanin, J. (2010). Komunikacijske vještine u zdravstvu. Zdravstveno Veleučilište. Naklada Slap. Jastrebarsko.</td><td></td><td></td></tr>
<tr><td colspan="3">Class materials</td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Knapp, M. L., Hall, J. A. (2010). Neverbalna komunikacija u ljudskoj interakciji. Naklada Slap. Jastrebarsko.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Hygiene and Epidemiology					
Code	**ZSZ610**	Year of study	1			
Course teacher	Assoc. Prof. Anamarija Jurcev Savicevic, MD, PhD	Credits (ECTS)	3			
Associate teachers	Full Professor Rosanda Mulic, MD, PhD Assoc. Prof. Ingrid Tripković, MD, PhD Asst. Prof. Iris Jerončić Tomić, MD, PhD Asst. Prof Zlatka Knezović, PhD Mentors from teaching bases	Type of instruction (number of hours)	L	S	E	T
			30	20	5	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: - identify and describe hygienic-epidemiological concepts, phenomena and problems in the community and explain the causes of certain diseases, as well as methods of their recognition (detection); - group and differentiate diseases according to their epidemiological characteristics and identify infectious diseases in sporadic and epidemic forms - analyze existing data of importance to the community and interpret the impact of certain preventive measures on the spread of these diseases over a period of time; - plan, implement and evaluate general and specific prevention measures - collect samples for laboratory tests, manipulate delivery, storage and distribution of vaccines (cold chain), apply epidemiological surveys and basic procedures of DDD measures - explain methods of controlling nosocomial infections - explain and identify sources of pollution (chemical, biological and physical) - explain the importance and control of healthy water and food, as well as proper disposal of waste, especially medical and especially hazardous waste - explain how to carry out and supervise sterilization and disinfection procedures - demonstate keeping records and storing samples

Course content broken down in detail by weekly class schedule (syllabus)

	Subject	
L	General epidemiology	3
L,S	Epidemiological concepts and epidemiological measurements	1,1
L,S	Special epidemiology	1,4
L,S	Hygiene	1,2
L	Basic factors of the epidemic process	1
S	Epidemiological methods	1
L,S	Anti-epidemic measures and procedures	1,1
L	Epidemiology of infectious diseases	1
L,S	Routes of transmission of infectious diseases	3, 1
L,S	General measures for protection against infectious diseases	1,1
S,E	Specific protection measures against infectious diseases	1,1
E	Vaccinations and calendar of mandatory vaccinations	1
S	Law on Protection of the Population from Infectious Diseases and Rulebook on Suppression of Hospital Infections	1

L	International Sanitary Regulations		1
L	Epidemiology of chronic mass noncommunicable diseases		2,1
L,S	An ecological approach in understanding health and disease		2,1
L,S,E	The most significant environmental and work environment factors that lead to disease		6,3,1
L,S	Toxic damage and toxicological protection		2,1
L,S,E	Assessment of individual risk factors in the environment and protection measures		3,2,2
L,S	Basic legal provisions related to environmental protection and the Food Act		1

Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	1	Research		Practical training	0.5
	Experimental work		Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Attendance and activity on lectures and seminars (for 100% attendance)	20	20
Written exam***	40	40
Seminar essay	20	20
Practical training	20	20
Total	100	100

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Ropac D., Puntarić D, i sur. Epidemiologija zaraznih bolesti. Zagreb: Medicinska naklada; 2010.		
	Kolčić I., Vorko Jović A. (Ur) Epidemiologija, Zagreb: Medicinska naklada; 2012.		

	Puntarić D, Miškulin M, Bošnir J. Zdravstvena ekologija. Zagreb: Medicinska naklada; 2011.		
Optional literature (at the time of submission of study programme proposal)	Jurčev Savičević A, Miše K. (ur). Tuberkuloza-stara dama u novom ruhu: Zagreb: Medicinska naklada, 2021. Internet and course materials		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Sociology of Health					
Code	**ZSZ611**	Year of study	1.			
Course teacher	Ana Ćurković, PhD, Assistant professor	Credits (ECTS)	1.5			
Associate teachers	Ana Jeličić, PhD, Assistant professor	Type of instruction (number of hours)	L	S	E	T
			20	12		
Status of the course	Mandatory	Percentage of application of e-learning	Under 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements.
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: - reproduce basic sociological knowledge for understanding the importance of social issues in medicine, health and health care, social policies in professional health care, - conduct, at the individual level, an elementary analysis of observed political and social phenomena and connect the results of analyzes with the needs of their future profession, - interpret basic knowledge of the principle of justice and equality in society and the importance of interdisciplinarity in the provision of health care, - explain the historical sequence of origin and development of socio-medical determinants, - explain the adopted basic sociological concepts that determine the position of man in society and the community, - recognize the sociological importance of health care and the position of health care workers in society and the community, - understand basic socio-medical criteria and research methods.

Course content broken down in detail by weekly class schedule (syllabus)

Type of instruction	Subject	Number of hours
L	Basic sociological concepts, the concept of sociology, the field of sociology, the scientific view of society	1
L	Sociology of health (medical sociology): history, definition, development, area of interest, topics, similarities and differences with other disciplines (social medicine and medical sociology)	2
L	Sociological theories of health and disease	1
L	Defining health and disease, normal and pathological	2
L/S	Social determinants of health and disease: class, age, gender, race and health, the role of culture in understanding health and disease	2/2
L/S	Social stratification: health and social inequalities	2/2
L/S	Quality of life, health improvement, life satisfaction and health (work, leisure)	1/2
L	Health behavior, patient role, roles and relationships of patient and health professionals	1
L/S	Mental illness, labeling and stigma	1/2
L/S	Social capital and health, stress and social support	1/2
L	Health systems and medical professions	1
L/S	Alternative and integrative medicine	1/2
L	Individual health and community health	2
L	Health promotion	2

<table>
<tr><td>Format of instruction</td><td colspan="2">☒ lectures
☒seminars and workshops
☐ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td>☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor
☐ (other)</td></tr>
<tr><td>Student responsibilities</td><td colspan="3">Regular class attendance
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<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0.30</td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>1.20</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
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<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="3"><table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Written exam</td><td>40</td><td>80</td></tr>
<tr><td>Seminar essay (presentation…)</td><td>10</td><td>20</td></tr>
<tr><td>Total</td><td>50</td><td>100</td></tr>
</table>
PERFORMANCE AND GRADE RATIO
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<tr><th>Achieved success percentage (%)</th><th>Criteria</th><th>Grade</th></tr>
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<tr><td>Cerjan-Letica G, Letica S, Babić-Bosanac S, Mastilica M, Orešković S. Medicinska sociologija, Medicinska knjiga Zagreb, 2003.</td><td></td><td></td></tr>
<tr><td>Štifanić M, Medicinska sociologija, Adamić, Rijeka, 2001. (str. 9.-65., 86.-108.)</td><td></td><td></td></tr>
<tr><td>Orešković, S. Novi društveni ugovor: Medicinska sociologija i znanost o životu, M.A.K. Golden, Zagreb, 1997. (str. 153.-164.)</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="3"></td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="3">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="3"></td></tr>
</table>

NAME OF THE COURSE	Public Health					
Code	**ZSZ613**	Year of study	1.			
Course teacher	Assoc. Prof. Anamarija Jurcev Savicevic, MD, PhD	Credits (ECTS)	1			
Associate teachers	Full Professor Rosanda Mulic, MD, PhD Asst. Prof. Iris Jerončić Tomić, MD, PhD Asst. Prof. Ana Ćurković, MD Asst. Prof. Željka Karin,MD, PhD Asst. Prof. Ivana Marasović-Šušnjara, MD, PhD	Type of instruction (number of hours)	L	S	E	T
			15	5		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: - explain the basic concepts in the field of public health (health, health care system, health economy) - identify and describe risk factors that affect health in all groups of society and analyze and relate the relationship between them - describe the basic indicators of demographic vital statistics of the Republic of Croatia and basic health-statistical indicators of health and disease - state the definition of health and disease, community health and define vulnerable groups - distinguish the types of health care institutions and health activities and the level of health care - assess the responsibility and competence of health professionals - explain the validity of health care and health insurance - explain the principles of community intervention and methods of health education and health promotion - deal with health documentation and reports in health care and procedures with the same - understand data secrecy and human rights - describe the methods of social intervention in the field of social security, unemployment and health

Course content broken down in detail by weekly class schedule (syllabus)

L	The role and tasks of public health as part of unique medicine. Health, health standards	2
L	Disease and the natural course of the disease	2
L	Factors affecting the health of the individual and the community	1
S	Community demographic health	1
S	The impact of primary social communities on the health of the individual	1
L	Basic skills of communication with the individual / patient	2
L	Health and disease in the life cycle (childhood, adolescence, adulthood, old age)	1
S	Minority and segregated groups	1

	L	Health behavior and principles of health education and health promotion	2
	S	Basics of recognizing the socio-medical needs of vulnerable groups	2
	L	Basic principles of medical ethics	2
	L	Health workers, Health insurance, Public and private health	2

Format of instruction	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0.5	Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	0.5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Written exam	50	50
Attendance and activity on lectures and seminars (for 100% attendance)	50	50
Total	100	100

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Puntarić D, Ropac D, Jurčev Savičević A. i sur. Javno zdravstvo. Zagreb: Medicinska naklada; 2015		

Optional literature (at the time of submission of study programme proposal)	Internet and course materials
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation

Other (as the proposer wishes to add)	

NAME OF THE COURSE	Biochemistry					
Code	**ZSZ614**	Year of study	1			
Course teacher	Full Prof. Irena Drmić Hofman, PhD	Credits (ECTS)	2			
Associate teachers	Ivana Franić, MSc	Type of instruction (number of hours)	L	S	E	T
			20	10		
Status of the course	Essential	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able to: - define electrolyte status - distinguish isotonic solutions from hypo- and hypertonic solutions - define the acid-base status and recognize the laws of buffer behavior into the human body - explain the function of hemoglobin and the mechanism of oxygen transfer - describe the action of enzymes and vitamins as precursors of coenzymes - indicate the biochemical reactions in the metabolic pathways of catabolism and anabolism of carbohydrates, fats, and proteins - explain the principles of action of hormones - explain the biochemical mechanism of blood clotting - state and explain the basic tests for the analysis of metabolic functions (glucose, cholesterol and triglycerides; urea, creatinine and urine) - list and describe the principles of the basic tests of liver function (aminotransferase, GGT, LDH, bilirubin, albumin, basic coagulation tests)

Course content broken down in detail by weekly class schedule (syllabus)

Teaching Methods	Topic	No. of student hours
L/S	Fluid and electrolyte balance	2/1
L/S	Acidobase balance	2/1
L/S	Hemoglobin	2/1
L/S	Enzymes and vitamins as precursors of coenzymes	2/1
L/S	Metabolic fuels	2/1
L/S	Metabolism of carbohydrates	2/1
L/S	Metabolism of fats	2/2
L/S	Metabolism of proteins	2/1
L/S	Hormones	2/1
L	Tests of basic metabolic functions	1
L	Liver function tests	1

Format of instruction		
	x lectures x seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

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<tr><td>Written exam</td><td>2</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
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RATIO OF SUCCESS AND EVALUATION
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<tr><td colspan="3">1. Topić E, Primorac D, Janković S: Medical and Biochemical Diagnostics in Clinical Practice. Medicinska naklada, Zagreb, 2nd edition, 2018.</td><td></td><td></td></tr>
<tr><td colspan="3">2. Harper's Illustrated Biochemistry, Medicinska naklada, Zagreb, 28 th edition Lange Medical Books / McGraw-Hill, 2009. (Croatian translation, 2011.)</td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Murphy MJ, Srivastava R, Deans K. Clinical Biochemistry, 6th Edition, Elsevier, 2018.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Biophysics					
Code	**ZSZ615**	Year of study	1			
Course teacher	Prof. Ivica Aviani, PhD	Credits (ECTS)	2			
Associate teachers	Prof. Ante Bilušić, PhD Mr. Darijo Radović, dr. med., senior lecturer	Type of instruction (number of hours)	L	S	E	T
			20	5		
Status of the course	Compulsory	Percentage of application of e-learning	Up to 20 %			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	. No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion and passing of the course, students are expected to be able to: • interpret and use physical quantities and units used in biophysics. • apply basic physical laws to describe the operation of medical devices. • apply basic physical laws to describe the functioning of the human body. • apply basic physical laws to describe the interaction of the human body with the environment. • explain the principles of operation of basic medical devices. • explain the physical principles of basic methods of medical diagnosis. • - explain the effects of external energy sources on the human body.

Course content broken down in detail by weekly class schedule (syllabus)

Type of class	Subject	Number of hours
lecture	PHYSICAL QUANTITIES AND UNITS - Introduction - Fundamental and derived units of measurement - Units of length, weight, mass, time	1
lecture	LAWS OF MOTION - Speed and acceleration - Newton's laws of motion - Inertial forces	2
lecture	EFFECTS OF GRAVITATIONAL FORCES ON THE HUMAN BODY - Center of gravity and equilibrium of the Body - The law of leverage - Density, sedimentation, centrifugation - Influence of weightlessness and extreme gravity	2
lecture	WORK, POWER, ENERGY - Work, power, energy - Types and transformations of energy: application of conservation laws	1
lecture	PRESSURE IN THE HUMAN BODY - Pressure: atmospheric, hydrostatic, hydraulic, osmotic - Effect of extreme pressures, decompression - Measurements of body pressure - Arterial and venous blood pressure - Eye pressure and intracranial pressure	2
lecture	FLUID MECHANICS - Surface tension and capillary effects - Fluid flow, viscosity, Bernoulli effect - Cardiovascular system	2
lecture	HEAT AND TEMPERATURE	2

		- Heat: nature, measurement, specific heat - Temperature scales - Heat Transfer: Thermal conductors and insulators - States of matter - Evaporation, boiling, relative humidity - Maintenance and regulation of body temperature	
	lecture	SOUND AND HEARING - Appearance of sound: sources and receivers - Description of Sound Waves: Frequency, intensity, and speed - Hearing threshold, noise, protection - Use of ultrasound	1,5
	lecture	LIGHT AND SEEING - Laws of propagation of light - Elements of the eye, vision correction, use of lenses - Biological effects of light - Use of light in diagnosis and therapy	1,5
	lecture	ELECTRICITY AND MAGNETISM - Voltage, current, resistance - Electric current in solids, electrolytes, gasses and in vacuum - Electrical properties of cells and tissues - Membrane potentials, conductivity of nerves - Electricity and the human body - Rhythm generator and defibrillation - EKG, EEG, EMG, EKT - magnetotherapy	2
	lecture	ELECTROMAGNETIC RADIATION - Electromagnetic waves - Atomic structure and electronic transitions - Electromagnetic radiation spectrum - Ionizing and non-ionizing radiation - The effect of radiation on the human body	1
	lecture	NUCLEAR DIAGNOSTICS AND THERAPY - Structure of atoms and isotopes - MRI - Atomic energy, radioactivity - Use of radioactive isotopes in medicine, PET - radiation, unit and dose protection - X-rays, CT	2
	seminar	Biophysical basics of haemorheology (pressures and volumes of blood in the vascular system)	1
	seminar	Biophysical basics of the physiology of seeing and hearing	1
	seminar	Electromagnetic radiation in medicine and radiation protection	2
	seminar	Biophysical basics of diagnostic methods	1

Format of instruction	☒ lectures ☒ seminars and workshops ☐ exercises ☐ *on line* in entirety ☒ partial e-learning ☐ field work	☐ independent assignments ☒ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

<table>
<tr><td></td><td colspan="6"></td></tr>
<tr><td rowspan="5">Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0.4</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>1,6</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><td>The final grade will constitute of</td><td>Percentage of grade (%)</td></tr>
<tr><td>Attendance and activity in lectures and seminars</td><td>20</td></tr>
<tr><td>Written exam</td><td>80</td></tr>
<tr><td>Total</td><td>100</td></tr>
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SUCCESS AND ASSESSMENT RELATIONSHIP
<table>
<tr><td>Percentage of grade achieved (%)</td><td>Description of criteria</td><td>Grade</td></tr>
<tr><td>60 – 69.9</td><td>met minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70 – 79.9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80 – 89.9</td><td>above average success</td><td>very good (4)</td></tr>
<tr><td>90 - 100</td><td>exceptional sucess</td><td>excelent (5)</td></tr>
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</td></tr>
<tr><td rowspan="4">Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Materials and presentations from lectures and seminars, Merlin, SRCE, 2021. https://moodle.srce.hr/2021-2022/</td><td></td><td></td></tr>
<tr><td colspan="3">Paul Davidovits, Physics in Biology and Medicine, 3rd ed, Academic Press, New York 2019.</td><td></td><td></td></tr>
<tr><td colspan="3">I. Aviani and A.Bilušić, Fundamentals of Biophysics in Health Care, University of Split, under construction</td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">B. Middleton, J. Phillips, R. Thomas, S. Stacey, Physics in Anaesthesia, Oxfordshire, United Kingdom, Scion Publishing Ltd.,2012.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Anatomy					
Code	**ZSZ616**	Year of study	First			
Course teacher	Prof. Ivica Grković, MD PhD	Credits (ECTS)	3			
Associate teachers	Prof. Ana Marušić, MD PhD Prof. Katarina Vilović, MD PhD Prof. Katarina Vukojević, MD PhD Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			26	20	20	
Status of the course	Mandatory	Percentage of application of e-learning	0%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Knowledge, to be able to: - describe basic anatomy and structure of organs and organ systems - analyse the structure of the human body and interpret the vital functions - demonstrate the application of general anatomical principles and concepts to organs/organ systems - recognize the importance of continuous revision of knowledge on the structure of the human body for the comprehension of teaching units in clinical medicine (in later years of study), as well as throughout their professional life.

Course content broken down in detail by weekly class schedule (syllabus)

1.	Introduction and osteology 1 and 2	
2.	Joints 1 and 2	
3.	Muscular systems 1 and 2	
4.	Cardiovascular system	
5.	Digestive system	
6.	Respiratory system	
7.	Urinary system	
8.	Reproductive system	
9.	Nervous system	
10.	Sensory system	

Format of instruction		
	☒ lectures ☒ seminars and workshops ☒ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each*						
	Class attendance		Research		Practical training	
	Experimental work		Report			

<table>
<tr><td rowspan="3">activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td>3</td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td></td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Written exam</td><td>50</td><td>50</td></tr>
<tr><td>Total</td><td>50</td><td>100</td></tr>
</table>
PERFORMANCE AND GRADE RATIO
<table>
<tr><th>Achieved success percentage (%)</th><th>Criteria</th><th>Grade</th></tr>
<tr><td>60-69,9</td><td>meets the minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80-89,9</td><td>above average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>exceptional success</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td colspan="2">Availability via other media</td></tr>
<tr><td></td><td colspan="3">Bajek, S; Bobinac, D; Jerković, R; Malnar, D. Sustavna anatomija čovjeka. Digital point tiskara. Rijeka, 2007.</td><td></td><td colspan="2"></td></tr>
<tr><td></td><td colspan="3">Netter, F.H.: Atlas of Human Anatomy, ICON Learning Systems; 3rd Bk&Cdr edition, 2003</td><td></td><td colspan="2"></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Sobotta: Atlas anatomije čovjeka, Svezak 1 & 2, Naklada Slap, 2000
Bobinac D., Dujmović M.: Osnove anatomije, Glosa. Rijeka, 2003.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">Regularity of attending classes:
▪ - lectures - at least 80% of all classes attended,
▪ - seminars 90% and exercises 100%,
▪ - active participation in classes.</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Physiology					
Code	**ZSZ617**	Year of study	1			
Course teacher	Assoc. Ante Obad, PhD, MD	Credits (ECTS)	3			
Associate teachers	Prof. Maja Valić, PhD, MD Prof. Zoran Valić, PhD, MD	Type of instruction (number of hours)	L	S	E	T
			30	7	10	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: - Describe main physiological processes at the cellular level, organsystems and organism as a whole - Define normal functions of all organ systems of the human body: cardiovascular, hematopoietic, musculoskeletal, respiratory, digestive,uropoietic, immune, endocrine and nervous systems - Explain and understand the interrelationships between individualorgan systems in the human body - Interpret general response patterns of an organism - Explain the basic principles of functional tests and identify deviationsfrom normal values.

Course content broken down in detail by weekly class schedule (syllabus)

Type	THEME	Hours
P	Introduction to physiology (cell physiology and general physiology)	2
P	Muscle and neuromuscular transmission	3
P	Neuroscience	3
P	Heart	4
P	Human arterial and venous system	3
P	Kidneys	3
P	Erythrocytes and blood groups	3
P	Respiration	3
P	General principles of gastrointestinal function	3
P	Introduction to endocrinology	3
S	Cardiac output volume control	2
S	Tissue control of blood flow, regulation of circulation	2
S	Hemostasis and blood clotting	1
S	Blood pressure regulation	2
E	Pressure measurement	3
E	ECG recording and interpretation	3
E	Spirometry	1
E	Ultrasound in clinical practice	3

<table>
<tr><td>Format of instruction</td><td>☒ lectures
☒ seminars and workshops
☒ exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td>☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor
☐ (other)</td></tr>
<tr><td>Student responsibilities</td><td colspan="2">Regular class attendance
Active participation in the teaching process
Password for AAI EduHr electronic identity to access e-learning</td></tr>
<tr><td>Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td colspan="2">
<table>
<tr><td>Class attendance</td><td>1,5</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>1,5</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
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</td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="2">
<table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Written exam</td><td>100</td><td>50</td></tr>
<tr><td>Total</td><td>100</td><td>100</td></tr>
</table>
RATIO OF SUCCESS AND EVALUATION
<table>
<tr><th>Achieved success percentage (%)</th><th>Criteria</th><th>Grade</th></tr>
<tr><td>60-69,9</td><td>meets minimum criteria</td><td>sufficient (2)</td></tr>
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<tr><td>80-99,9</td><td>above average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>outstanding success</td><td>excellent (5)</td></tr>
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<tr><td>Required literature (available in the library and via other media)</td><td colspan="2">
<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Guyton AC, Hall JE. Medical Physiology. 11. ed.Zagreb: Medicinska naklada; 2006.</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="2">Materials distributed to students during lectures and exercises.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="2">Regularity of attending classes:
1. lectures - at least 80% of all classes attended,
2. seminars 90% and exercises 100%,
3. active participation in classes.</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="2"></td></tr>
</table>

NAME OF THE COURSE	Biology					
Code	ZSZ618	Year of study	1.			
Course teacher	Sendi Kuret, PhD, Assistant Professor	Credits (ECTS)	2			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			20	10		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After passing the exam the student will be able to: - describe the structure of a eukaryotic cell and compare it with the structure of a prokaryotic cell, - define and describe cell compartments and join them into a functional entirety, - analyze and describe individual phases of the cell cycle and cell division, - explain cell renewal, aging and cell death, - explain the basic principles of genetics and solve simple tasks in this area.

Course content broken down in detail by weekly class schedule (syllabus)		
L/S	Cell structure and function. Prokaryotes *vs* Eukaryotes. Cell chemistry. Macromolecules.	
L/S	Deoxyribonucleic acid – DNA.	
L/S	Ribonucleic acid - RNA. Transcription.	
L/S	The nucleus. DNA-RNA-Proteins. Translation.	
L/S	Cell membrane-structure and transport.	
L/S	Bioenergetics and metabolism.	
L/S	Cytoskeleton and cell movement.	
L/S	Cell cycle. Fertilization.	
L/S	Basic principles of medical genetics.	
L/S	Cell death and cell renewal.	

Format of instruction		
☒ lectures ☒ seminars and workshops ☐ exercises ☐ *on line* in entirety ☒ partial e-learning ☐ field work		☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)

Student responsibilities	
	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0.4	Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,40	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1,20	Project		(Other)	

<table>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td>
<table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Attendance and activity on lectures and seminars</td><td>20</td><td>20</td></tr>
<tr><td>Written exam</td><td>80</td><td>80</td></tr>
<tr><td>Total</td><td>100</td><td>100</td></tr>
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SUCCESS AND ASSESSMENT RELATIONSHIP
<table>
<tr><th>Percentage of grade achieved (%)</th><th>Description of criteria</th><th>Grade</th></tr>
<tr><td>60 – 69.9</td><td>met minimum criteria</td><td>sufficient (2)</td></tr>
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<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Cooper GM, Hausman RE. The Cell, a Molecular Approach. 8th ed. Washington DC, Sunderland (Massachusetts): ASM Press, Sinauer Associates; 2019.</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td>Cox TM, Sinclair J. Molecular biology in medicine. Blackwell Science, 1997. Oxford, UK (selected chapters).</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td>▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td></td></tr>
</table>

NAME OF THE COURSE	Basics of Nursing Care					
Code	**ZSZ620**	Year of study	1.			
Course teacher	Prof. Julije Meštrović, MD, PhD	Credits (ECTS)	1			
Associate teachers	Diana Aranza, master of Nursing	Type of instruction (number of hours)	L	S	E	T
			15	4		
Status of the course	Mandatory	Percentage of application of e-learning	up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. To explain the nature, characteristics and principles of health care; 2. To explain health care related to meeting basic human needs; 3. To describe the admission, transfer and discharge of the patient; 4. To carry out a suitable disinfection and sterilization procedure; 5. To measure vital signs, notice deviations from normal values and to take appropriate interventions; 6. To assess bodily excretions, identify deviations and difficulties and apply appropriate interventions; 7. To apply enteral and parenteral therapy; 8. Planning and implementing care for a patient with cognitive-perceptual difficulties, an elderly patient, and a dying patient; 9. Conducting a physical examination of the patient 10. To properly write and process nursing documentation

Course content broken down in detail by weekly class schedule (syllabus)

Teaching methods	Topic	Number of student hours
L1	Vital signs in children	2
L2	Features and principles of health care Admission, transfer and discharge of the patient from the health institution.	2
L3	Basic human needs.	2
L4	General infection prevention procedures.	2
L5	Vital signs.	3
L6	Body excretions.	2
L7	Application of drugs.	2
S1-4	Nursing care to maintain skin integrity. Nursing care for patients with cognitive-perceptual difficulties. Nursing care for elderly. Nursing care for dying patients. Nursing documentation. Providing nursing care for specific groups of patients.	4

Format of instruction	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety Xpartial e-learning ☐ field work	X independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

<table>
<tr><td rowspan="5">Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,33</td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>0,67</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><th>Evaluation indicators</th><th>Success (points)</th><th>Share in overall grade (%)</th></tr>
<tr><td>Written exam</td><td>40</td><td>66,67</td></tr>
<tr><td>Seminar essay (presentation…)</td><td>20</td><td>33,33</td></tr>
<tr><td>Total</td><td>60</td><td>100</td></tr>
</table>
PERFORMANCE AND GRADE RATIO
<table>
<tr><th>Achieved success percentage (%)</th><th>Criteria</th><th>Grade</th></tr>
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</td></tr>
<tr><td rowspan="4">Required literature (available in the library and via other media)</td><td colspan="4">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="4">1. Čukljek S. Basics of Nursing care. University of Applied Health Sciences, Zagreb, 2005.</td><td></td><td></td></tr>
<tr><td colspan="4">2. Henderson, V. Basic Principles of Nursing Care. HUSE and HUMS, Zagreb 1994.</td><td></td><td></td></tr>
<tr><td colspan="4">3. Aranza D. Teaching materials.</td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">1. Fučkar, G. Process of Nursing Care. School of Medicine of the University of Zagreb. Zagreb, 1992 (select chapters).
2. Fučkar, G. Nursing Diagnoses. HUSE. Zagreb 1992 (select chapters)</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Radiation Physics and Electronics					
Code	**ZSR601**	Year of study	1.			
Course teacher	Mile Dželalija, PhD, Full professor	Credits (ECTS)	3.5			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			20	15	18	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: - Describe the electromagnetic radiation; - Describe the mass particles radiations; - Describe the structure of an atom and atomic nucleus; - Explain radioactivity; - Describe the radiation from the Sun and other stars; - Explain the interaction of radiation with matter; - Measure the radiation on the selected measuring device; - Explain the radiation in the environment; - Explain the biological effects of radiation and calculate their basic properties; - Explain the criteria for radiation protection; - Explain the properties selected from the Basics of physical electronics.
Course content broken down in detail by weekly class schedule (syllabus)	Thematic units: - Electromagnetic radiation; - Mass particles radiation; - The structure of an atom and atomic nucleus; - Radioactivity; - Radiation from the Sun and other stars; - Interaction of radiation with matter; - Radiation measurement and examples of measuring devices; - Radiation in the environment; - The biological effects of radiation; - Criteria for radiation protection; - Basics of physical electronics; -Laboratory exercises.

Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	X independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each*	Class attendance		Research		Practical training	
	Experimental work		Report			

activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Essay		Seminar essay	0,6	(Other)	
	Colloquium	1,0	Oral exam		(Other)	
	Written exam	2,4	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Written exam					

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Mile Dželalija, Fizika zračenja i elektronika, Sveučilište u Splitu, u izradi		
	ppt		Merlin i MS Teams

Optional literature (at the time of submission of study programme proposal)	Jakobović, Z., Fizika zračenja, Zdravstveno veleučilište, Zagreb, 2007.
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Introduction to Radiology					
Code	**ZSR602**	Year of study	1.			
Course teacher	Stipan Janković, MD, PhD, Full professor with tenure	Credits (ECTS)	4			
Associate teachers	Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases	Type of instruction (number of hours)	L	S	CE	M
			15	15	30	10
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: 1. Describe the basic concepts of radiation and dosimetry, 2. Describe the radiation protection, 3. Describe the radiological methods, 4. Describe the basic radiological terminology, 5. Describe duties of bachelor of radiologic technology, 6. Describe the principles of X-ray tube, 7. Describe images, 8. Describe radiography, 9. Assessment of image quality 10. Describe computerized and digital radiography

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P1-2	Basic concepts of radiation and dosimetry	2
P3-4	Radiation protection	2
P5-6	Review of radiological methods	2
P7	Basic radiological terminology	1
P8	Tasks of Bachelors of Radiological Technology	1
P9	Principles of X - ray tube operation	1
P10	Photography	1
P11	Radiography	1
P12	Evaluation of image quality	1
P13	Computed radiography	1
P14-15	Digital radiography	2
S1-2	Topics of seminar papers and instructions and method of presentation	2
S3-10	Submission and presentation of seminar papers	8
S11-15	Discussions on a given topic	5
M1-10	Develop the student's standard skills and tasks and train the student to create a complex exercise as well as train the student's constancy in performing certain exercises and tatasks.	10

		Preparing the student for mastering a new exercise and developing new work skills, as well as student participation in the teacher's demonstration of a new exercise with a detailed elelaboration of all topics of the whole course	
	KL1-30	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired throughout the course introduction to radiology.	30

Format of instruction	■ lectures ■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3.5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	43.75	87,5
Seminar assignment (presentation…)	6.25	12.5
Total	**50**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Janković S, Mihanović F. Uvod u radiologiju. Split: Sveučilište u Splitu, 2014.		
	Hebrang A., Lovrenčić M. Radiologija, Medicinska naklada, Zagreb, 2001.		
Optional literature (at the time of	Rosenbusch G, Oudker M, Ammann E.: Radiology in Medical dijagnostics – Evolution of X-ray applications 1895-1995		

submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.

NAME OF THE COURSE	Radiological Propaedeutic					
Code	**ZSR603**	Year of study	1.			
Course teacher	Igor Borić, MD Assistant Professor	Credits (ECTS)	2			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			10	10	10	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: - Describe health care, - Describe health professionals and associates, - Describe the Code of Ethics, - Describe violation of ethical principles, - Describe patient safety in the diagnostic process, - Describe the procedure with radiological equipment, - Prepare patients for examination, - Describe acute medical situations, -Describe the examination algorithms.
Course content broken down in detail by weekly class schedule (syllabus)	- Health care, - Health professionals and associates, - Code of Ethics, - Violation of ethical principles, - Patient safety in the diagnostic process, - Procedure with radiological equipment, - Preparation of patients for examination, - Acute medical situations, - Examination algorithms.

Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0,8	Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,2	(Other)	
	Colloquium		Oral exam		(Other)	
	Written exam	1	Project		(Other)	
Grading and evaluating student	Written exam					

work in class and at the final exam			
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Hebrang A., Lovrenčić M. Radiologija, Medicinska naklada, Zagreb, 2001		
	Borić I. Radiološka propedeutika – nastavni tekst,Merlin platforma		
	Teaching materials and ppt presentations posted on the Merlin platform		
Optional literature (at the time of submission of study programme proposal)	Jakobović, Z., Fizika zračenja, Zdravstveno veleučilište, Zagreb, 2007.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Radiobiology and Radiation Protection					
Code	**ZSR604**	Year of study	1.			
Course teacher	Stipan Janković, MD, PhD, Full professor with tenure	Credits (ECTS)	3,5			
Associate teachers	Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases	Type of instruction (number of hours)	L	S	CE	T
			20	15	18	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: 1. Describe the types of radiation, 2. Describe the interaction of radiation with living matter, 3. Distinguish the effects of low and high doses of radiation on the body, 4. Describe damage to individual organs and systems, 5. Describe acts governing the radiation protection, 6. Describe dosimetry and its implementation, 7. Describe implementation of the principles of protection in daily work, 8. Describe use of protective equipment, 9. Describe ways to increase the ionizing and non-ionizing radiation safety in medicine

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P	Type of radiation	3
P	Interactions of radiation with living matter	2
P	Distinguishing the effects of small and large doses of radiation on the body	2
P	Damage to individual organs and systems	2
P	Knowledge of the laws governing radiation protection	2
P	Dosimetry and its implementation	2
P	Implementation of protection principles in everyday professional work	2
P	Use of protective equipment	2
P	Increasing the safety of ionizing and non-ionizing radiation in medicine	3
S	Seminar papers, topics, instructions, method of presentation, literature search and writing seminar papers	5
S	Submission and presentation of seminar papers, discussions	10
KL	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired about radiobiology and radiation protection	18

Format of instruction	■ lectures	☐ independent assignments

	■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	60	85,71
Seminar assignment (presentation…)	10	14,29
Total	**70**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Janković S, Mihanović F. Uvod u radiologiju. Split: Sveučilište u Splitu, 2014.		
	Hebrang A, Petrovčić F. Radijacija i zaštita u medicinskoj dijagnostici, MK, Zagreb, 1989.		
	Brnić Z, Hebrang A: Osnovni pojmovi iz radiobiologije i zaštite (skripta)		
	Nastavni materijali sa predavanja		

Optional literature (at the time of submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation

Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.

NAME OF THE COURSE	Clinical Practice I				
Code	**ZSR605**	Year of study	1.		
Course teacher	Frane Mihanović, PhD, asistant. prof.	Credits (ECTS)	11		
Associate teachers	Tatjana Matijaš, master of radiological technology, lecturer., Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			5	25	215	
Status of the course	Mandatory	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: -Explain basic concepts of radiological diagnosis, -Apply basic knowledge of radiation protection, -Apply knowledge of radiographic process and handle radiological devices supervised by a mentor.

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
L	Basic concepts of radiological diagnostics, basic knowledge of radiation protection, radiographic processes and radiological image receptors	5
S	Topics of seminar papers and instructions and method of presentation	5
S	Submission and presentation of seminar papers	**15**
S	Discussions on a given topic	5
E	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired according to the plan and program listed in the Clinical Skills Booklet	215

Format of instruction	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training	7	
Experimental work		Report				
Essay		Seminar essay	3	(Other)		
Tests		Oral exam	1	(Other)		
Written exam		Project		(Other)		

<table>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td>
<table>
<tr><th>Verification indicators</th><th>Success (points)</th><th>Part of grade (%)</th></tr>
<tr><td>Seminar assignment (presentation…)</td><td>25</td><td>25</td></tr>
<tr><td>Oral exam</td><td>12,5</td><td>12,5</td></tr>
<tr><td>Practical work</td><td>62,6</td><td>62,6</td></tr>
<tr><td>Total</td><td>100</td><td>100</td></tr>
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RATIO OF SUCCESS AND EVALUATION
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<tr><td>Mašković J. Konvencionalne radiološke metode 2005. (Autorizirana skripta)</td><td></td><td></td></tr>
<tr><td>Janković S, Mihanović F. Uvod u radiologiju. Split: Sveučilište u Splitu, 2014.</td><td></td><td></td></tr>
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<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td>

Teaching quality analysis by students and teachers
Exam passing rate analysis
Committee for control of teaching reports
External evaluation

</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td></td></tr>
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NAME OF THE COURSE	Receptors of radiological images						
Code	**ZSR638**	Year of study	1				
Course teacher	Associate Professor Krešimir Dolić, MD, PhD	Credits (ECTS)	3.5				
Associate teachers	Tatjana Matijaš, master of radiological technology, lecturer Other associates in the field of radiological technology	Type of instruction (number of hours)	L	S	CE	SCE	M
			20	10	30	10	10
Status of the course	mandatory	Percentage of application of e-learning	Up to 10%				

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able to: 1. Describe X-ray films, exposure, film development, photographic errors, and assess film quality 2. Show and interpret the origin, transmission and visual presentation of the radiological image, its documentation and storage 3. Describe technical factors related to radiological devices, image receptor and image storage and transmission systems that affect its value 4. Acquisition of knowledge about the composition of X-ray photographic material, types and properties of X-ray film and the storage of X-ray films. Acquisition of knowledge about the material and purpose and the advantages of using radiographic foils. 5. Introduction to the theory of photochemical action, dark chamber, photographic processing and marking of exposed film, methods of chemical processing of film, radiographic cassettes, maintenance of automatic film processing devices and radiographic evaluation. 6. Relatively large fund of exercise hours provides the possibility of training for independent work, i.e. for professional handling of unexposed and exposed X-ray film, radiographic cassettes and foils and all available devices for automatic film processing. 7. Types of CR detectors - "storage phosphor" (SP). Needle / crystal detectors, Dual sided read out CRT systems, Line scan reader CR systems. 8. Types of DR detectors and principles of image formation, silicone active matrix, capacitor, thin film diodes and transistors. Scintillator, photodiode and silicone active matrix. Latent image generation, indirect digital detector reading system.

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P	Film in radiology, introduction Photographic effect of X-rays and photographic effect of visible light. Definition of the concept of shadow in radiology and types of shadows in film. Difference in the presentation of shadows on the fluorescent screen of a diascopic device and film.	3
P	Types of films and substrates in radiology - X - ray film backing. Halation-antihalation protection. Cross-over effect - anticross-over protection. Chromatic sensitization of X-ray film. single-layer and double-layer X-ray. Spectrally sensitized film. Laser film.	3

	P	Properties of photographic material. Storage of X-ray films. X-ray film formats.	1		
	P	Theory of photochemical action. Dark chamber. Photographic processing of the exposed film. Film development (developer components: developer in the narrow sense, antioxidant, alkalizer, retarder) Intermittent bath (intermediate bath). Film fixing (fixing components: narrow fixative, acidifier, antioxidant, photolayer hardener) Film rinsing	2		
	P	Radiographic cassettes. X-ray film marking Maintenance of automatic film processing devices (daily, weekly and monthly maintenance).	1		
	P	Film evaluation and artifacts, Hardness of radiographs, illuminated - exposure of radiographs, contrast, sharpness of radiographs, Artifacts on radiograph.	1		
	P	Computed Radiography (CR) 1 - Principles of photostimulating luminescence, latent image, barium fluorohalide crystals and europium (BaFIX: Eu). Laser information reading and stimulation, photodetector, photomultiplier tube, digitalization of analog information (ADC) Computed radiography (CR) 2 - Types of CR detectors - "storage phospor" (SP). Needle / crystal detectors, Dual sided read out CRT systems, Line scan reader CR systems.	4		
	P	Digital radiography (DR) - detector types, imaging principle, silicone active matrix, capacitor, thin film diodes and transistors. Digital radiography (DR) - indirect digital detectors - scintillator, photodiode and silicone active matrix. Latent image formation, reading system Physical characteristics and quality of digital image, presentation of digital radiogram, Spatial resolution - MTF, Nyqusit's theorem, "aliasing", sensitivity to X-rays - DQE, signal-to-noise ratio, dynamic width, other characteristics - sensitivity to scattered radiation, image degradation in CR or DR, spatial and temporal artifacts, temporal stability, LCD and CRT monitors, digital image formats and compression.	5		
	S	Topics of seminar papers and instructions and method of presentation	2		
	S	Submission and presentation of seminar papers, discussions on a given topic	8		
	M	To develop students 'standard skills and tasks and to train students to create complex exercises as well as to train students' perseverance in performing certain exercises and tasks. Display of X-rays and evaluation of film and observed artifacts, radiograph hardness, radiograph exposure, contrast, radiograph sharpness. Introduction to the differences between analog and digital recordings and their comparison.	10		

	CE	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired about radiological image receptors	30
	SCE	Mastering special professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired about radiological image receptors	10

Format of instruction	■ lectures ■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	43	86
Seminars (ppt presentation)	7	14
Total	**50**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

	Title	Number of copies in the library	Availability via other media	
Required literature (available in the library and via other media)	Janković A, Eterović D: Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada,2002.			
	Hebrang A, Lovrenčić M.: Radiologija, Medicinska naklada, Zagreb, 2001			
	Janković S, Mihanović F, Punda A, Radović D, Barić A, Hrepić D. Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini. Split, 2015.			
Optional literature (at the time of submission of study programme proposal)	Oborska-Kumaszynska D, Wisniewska-Kubka S. Analog and digital systems of imaging in roentgenodiagnostics. Pol J Radiol, 2010. Körner M, Weber CH, Wirth S, Pfeifer KJ, Reiser MF, Treitl M. Advances in digital radiography: physical principles and system overview. *Radiographics*. 2007. Seibert JA. Digital radiography: The bottom line comparison of CR and DR technology. Applied Radiology. 2009			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation			▪
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.			

NAME OF THE COURSE	Introduction to Scientific Work					
Code	**ZSL621**	Year of study	2.			
Course teacher	Davorka Sutlović, PhD, Full professor with tenur	Credits (ECTS)	2			
Associate teachers	Vjekoslav Krželj, PhD, Full professor with tenor Frane Mihanović, PhD, Assistant professor Sendi Kuret, PhD, Assistant professor Ante Burger, PhD, Assistant professor Diana Aranza, lecturer Mario Marendić, lecturer Mario Podrug, assistant	Type of instruction (number of hours)	L	S	E	F
			6	10	12	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course objectives	To transfer to students knowledge from research methodology that will integrate with the acquired knowledge about the use of medical information and the application of statistical methods and procedures in medicine. Based on such integration, students will acquire basic knowledge and skills for research and use of professional and scientific literature.
Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing and passing the course, students will: - Understand the sources and ways of creating real knowledge; - Explain the different structures of health research; - Understand the different ways of presenting the data collected in the research; - Critically evaluate data views and critically analyze scientific reports on medical research.

Course content broken down in detail by weekly class schedule (syllabus)

Course type	Teaching unit	Hours
L/S	Scientific research	2,1
L/S	Hypothesis and statistical hypothesis	1,1
L/S	Types of research	1,1
L/S/E	Research planning	1,1,2
L/S/E	Interpretation of results	1,1,2
S/E	Data display	2,1
S/E	Scientific publication	1,1
S/E	Material of a scientific article	1,2
S/E	Publication of research	1,2

Format of instruction		
	☒ lectures ☒ seminars and workshops ☒ exercises ☐ *on line* in entirety ☒ partial e-learning ☐ field work	☐independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0.2	Research		**(Other)**	
	Experimental work		Report		**(Other)**	
	Essay		Seminar essay		**(Other)**	
	Tests		Oral exam		**(Other)**	
	Written exam	**1.0**	Project	0.8	(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Rating share (%)
Attendance and activity at lectures and seminars for 100% attendance	4	10
Project	16	40
Written exam (minimum pass rate on the test is 60% of correctly solved tasks)	20	50
Total	**40**	**100**

RATIO OF SUCCESS AND EVALUATION

Achieved success percentage (%)	Criterion	Rating
60-69,9	meets minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	outstanding success	excellent (5)

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Marušić M, ed. Introduction to scientific work in medicine. 4th edition. Zagreb: Medicinska naklada; 2008	0	https://webknjizara.hr/
Teaching materials for individual teaching units		

Optional literature (at the time of submission of study programme proposal)

1. Petz, B. Osnovne statističke metode za nematematičare. 5. izdanje. Jastrebarsko: Naklada Slap 2004.
1. Day RA, Gastel N. How to write and publish a scientific paper, 6th edition. Westport, Connecticut: Greenwood Press, 2006.
2. Lang T, Secic M. How To Report Statistics in Medicine: Annotated Guidelines for Authors, Editors, and Reviewers, 2nd edition. Philadelphia: American College of Physicians, 2006.
3. Ogrinc GS, Headrick LA. Fundamentals of Health Care Improvement. Oakbrook Terrace (Il): USA Joint Commission Resources, 2008.

Committee on Assessing Integrity in Research Environments. Integrity in Scientific Research. Washington DC: Institute of Medicine and National Research Council.

Quality assurance methods that ensure the acquisition of exit competences

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

Other (as the proposer wishes to add)

NAME OF THE COURSE	Use of Scientific Technology					
Code	**ZSZ622**	Year of study	2.			
Course teacher	Antonela Matana, PhD Assistant Professor	Credits (ECTS)	1.5			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			10	12		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: - Identify the characteristics of successful innovations in scientific technology - Explain the significance of use of artificial intelligence in medicine - Give examples of innovations in several of the most advanced hospitals which will pervade the healthcare system in the future

Course content broken down in detail by weekly class schedule (syllabus)

Course type	Teaching unit	Hours
L,S	Characteristics and examples of technology trends in healthcare systems (VoIP, RFID, E-prescriptions, smartphones, etc.)	7
L,S	Artificial intelligence in medicine	7
L,S	Hospitals of the future (WiFi, voice recognition, digital pens, smart cards, memory devices, RFID, Web 2.0, open source code in medicine, Internet 2, biometrics)	8

Format of instruction

X lectures	☐ independent assignments
X seminars and workshops	☐ multimedia
☐ exercises	☐ laboratory
☐ *on line* in entirety	☐ work with mentor
☐ partial e-learning	☐ (other)
☐ field work	

Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance	0,5	Research		Practical training	
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam		(Other)	
Written exam	1	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Rating share (%)
Written exam	100	100
Total	**100**	**100**

<table>
<tr><td></td><td>

RATIO OF SUCCESS AND EVALUATION

<table>
<tr><td>Achieved success percentage (%)</td><td>Criterion</td><td>Rating</td></tr>
<tr><td>60-69,9</td><td>meets minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80-89,9</td><td>above average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>outstanding success</td><td>excellent (5)</td></tr>
</table>

</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td>

<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Hoyt RE: Medical Informatics – A practical guide for healthcare professionals, 3rd edition, Medical Informatics Program, Pensacola, Florida, USA 2009 - poglavlja 9 i 21</td><td></td><td></td></tr>
</table>

</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td>Hoyt RE: Medical Informatics – A practical guide for healthcare professionals, 3rd edition, Medical Informatics Program, Pensacola, Florida, USA 2009 – poglavlja 1-8, 10-20</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td>

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td></td></tr>
</table>

NAME OF THE COURSE	Physical Culture II					
Code	**ZSZ623**	Year of study	1			
Course teacher	Željko Kovačević, PhD Assistant Professor	Credits (ECTS)	1,5			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			3	8	14	38
Status of the course	Mandatory	Percentage of application of e-learning				

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course students will: - Harmonize and improve physical and spiritual health - Manage and improve the quality of healthy living

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Class unit	Class hour
T	Framework program; football, handball, volleyball, athletics, basketball, swimming	10
T	Special program; badminton, indoor football, beach volleyball, hiking, table tennis, water polo	10
T	Custom program: for students with disabilities	10
T	Elective programs for the competition	8

Format of instruction

☐ lectures ☐ seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning X field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)

Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance	1,5	Research		Practical training	
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam		(Other)	
Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Class attendance	100	100
Total	**100**	**100**

PERFORMANCE AND GRADE RATIO

Grading (%)	Criteria	Grades
60-69.9	meets the minimum criteria	sufficient (2)
70-79.9	average success	good (3)
80-89.9	above-average success	very good (4)

	90-100	outstanding success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Mišigoj Duraković M.tjelesna aktivnost i zdravlje. Zagreb;Kineziološki fakultet; 1999		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	English for Radiologic Technology II					
Code	ZSR637	Year of study	2.			
Course teacher	Sonja Koren, MA, Senior lecturer	Credits (ECTS)	1,5			
Associate teachers	/	Type of instruction (number of hours)	L	S	E	T
				30		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Passed English for Radiologic Technology II
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course students will be able to: - develop language skills of speaking, listening, reading, and writing, - use professional terminology in the field of in the field of radiologic technology, - understand professional literature in English, - find, summarize, and present data and information.

Course content broken down in detail by weekly class schedule (syllabus)

S1.	Revision	2
S2.	Radiation, Electromagnetic radiation	2
S3.	X-rays	2
S4.	Radiologic Imaging	2
S5.	Computed tomography	2
S6.	MRI	2
S7.	Diagnostic ultrasound	2
S8.	Nuclear medicine procedures	2
S9.	PET	2
S10.	Radiation biology	2
S11.	Radiation Protection	2
S12.	Research studies and articles	2
S13.	Medical Ethics	2
S14.	Presentations of seminar papers	2
S15	Presentations of seminar papers	2

Format of instruction	☐ lectures x seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,45	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1,05	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Krišković A. ENGLISH IN RADIOLOGIC TECHNOLOGY. Medicinski fakultet Sveučilišta u Rijeci, Rijeka 2015., skripta		
	Glendinning, E.H., Howard, R. *Professional English in Use - Medicine*. Cambridge: Cambridge University Press; 2007 (selected chapters)		
Optional literature (at the time of submission of study programme proposal)	Chabner DE. *The Language of Medicine*. 8th edition. St. Louis: Saunders Elsevier; 2007		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Pathophysiology				
Code	**ZSZ625**	Year of study	2.		
Course teacher	Assist. Prof. Anteo Bradarić-Šlujo, MD, PhD	Credits (ECTS)	2		
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			30	8	0	38
Status of the course	Essential	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	- explain and interpret general pathophysiological principles, actions, causes and ways of pathophysiological processes; - describe and explain the general patterns of reaction of the organism to the damage; - identify general ways of organ and tissue insufficiency; - discuss the changes that occur in disorders of the control mechanisms of individual organ systems and the whole organism; - describe and explain the clinical features associated with pathophysiological processes in various pathological conditions

Course content broken down in detail by weekly class schedule (syllabus)

L1	Disorders of energy metabolism	2
L2	Pathophysiology of the respiratory system	2
L3	Pathophysiology of chromosomal and genetic disorders	2
L4	Disorders of acid-base balance	2
L5	Pathophysiology of inflammation and infection	2
L6	Disorders of carbohydrate and protein metabolism	2
L7	Pathophysiology of endocrinopathies	2
L8	Pathophysiology of malignant growth	2
L9	Pathophysiology of cardiovascular disorders 1	2
L10	Pathophysiology of cardiovascular disorders 2	2
L11	Pathophysiology of circulatory collapse	2
L12	Fluid and electrolyte disorders	2
L13	Pathophysiology of anemia	2
L14	Pathophysiology of gastrointestinal disorders	2
L15	Disorders of energy metabolism	2
S1	Coagulation disorders	2
S2	Pathophysiology of the renal system	3
S3	Repetition and integration	3

Format of instruction	☒ lectures ☒ seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance. Active participation in the teaching process. Password for AAI EduHr electronic identity for access to e - learning.	

Screening student work *(name the*	Class attendance	0.2	Research		Practical training	

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1.8	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Evaluation indicators	Success (points)	Share in overall grade (%)
Attendance and activity on lectures and seminars (for 100% attendance)	5	10
Written exam	45	90
Total	**50**	**100**

PERFORMANCE AND GRADE RATIO

Achieved success percentage (%)	Criteria	Grade
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	- Pathophysiology for higher medical schools: Gamulin S. Školska knjiga Zagreb, 2006.		

Optional literature (at the time of submission of study programme proposal)

- Harrison's Principles of Internal Medicine. 19. edition. 4. Croatian edition. Split: Placebo, 2019.
- Gamulin S, Kovač Z, Marušić M. Pathophysiology, VIII. edition. Medicinska naklada, Zagreb, 2018.

Quality assurance methods that ensure the acquisition of exit competences

- Students and lecturers' analysis of the quality of teaching,
- Analysis of the exam success rate,
- Reports of the Teaching Control Committee,
- External evaluation (visits by the quality control teams of the National Agency for Quality Control, participation in TEEP).

Other (as the proposer wishes to add)

NAME OF THE COURSE	Pathology					
Code	**ZSZ626**	Year of study	2			
Course teacher	Prof.dr.sc. Valdi Pešutić-Pisac	Credits (ECTS)	2			
Associate teachers	Prof.dr.sc. Šimun Anđelinović MDPhD ;	Type of instruction (number of hours)	L	S	E	T
			30	8		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. To list the groups of pathological processes, to describe their etiopathogenetic mechanisms, to list their most important morphological features and to connect them with the elements of the clinical background. 2. To list the most important pathological entities within individual organ systems, to connect them with general features of pathological processes, to describe their morphological features specific to each organ system and to be able to apply acquired knowledge to individual clinical examples. 3. To list and describe individual methods of morphological diagnosis and their clinical use. 4. To list and describe the signs of death. 5. To describe the most significant features of individual stages of autopsy.
Course content broken down in detail by weekly class schedule (syllabus)	

Form of teaching	General Pathology:	Hours number
P	Cellular adaptation	2
P	Cell injury and death	2
P	Acute and chronic inflamation	2
P,S	Reparation	1,1
P,S	Regeneration	1,1
P,S	Healing	1,1
P,S	Hemodynamic disorders	1,1
P,S	Genetic disorders	1,1
P,S	Diseases of immunity	1,1
P,S	Neoplasia	2,2
	Systemic Pathology:	
P	Cardiovascular pathology	1
P	Environmentalpathology	1
P	Lung pathology	1
P	Hemathopathology	1
P	Gastrointestinal pathology	1
P	Pathology of the Liver	1
P	And Pancreas	1
P	Kidney pathology	1
P	Genitourinary pathology	1
P	Breast pathology	1
P	Endocrine pathology	1
P	Skin pathology	1
P	Bone and joints pathology	1
P	Periferal nerves pathology	1

P	Scelatal muscle pathology		1
P	Central nervous systrem pathology		1

Format of instruction	x lectures x seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
Class attendance		Research		Practical training		
Experimental work		Report				
Essay		Seminar essay		(Other)		
Tests		Oral exam		(Other)		
Written exam	2,0	Project		(Other)		

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Rating share (%)
Written exam	50	100
Total	**50**	**100**

RATIO OF SUCCESS AND EVALUATION

Achieved success percentage (%)	Criterion	Rating
60-69,9	meets minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above average success	very good (4)
90-100	outstanding success	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	1. Jakić Razumović J, Šarčević B, Seiwert S. Patologija, SLAP, Zagreb, 2009.		

Optional literature (at the time of submission of study programme proposal)	1. 1. Damjanov I, Seiwerth S,Jukić S, Nola M. Patologija; 5.izdanje. Medicinska naklada , Zagreb, 2018
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

<table>
<tr><td>NAME OF THE COURSE</td><td colspan="6">Microbiology and Parasitology</td></tr>
<tr><td>Code</td><td colspan="6">ZSZ627</td></tr>
<tr><td>Study program</td><td></td><td>Year of study</td><td colspan="4">2.</td></tr>
<tr><td>Course teacher</td><td>asst. prof. Vanja Kaliterna, M.D., PhD, clinical microbiology specialist</td><td>Credits (ECTS)</td><td colspan="4">2</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2">asst. prof. Anita Novak, M.D., PhD, clinical microbiology specialist
asst. prof. Katarina Šiško Kraljević, M.D., PhD, clinical microbiology specialist
asst. prof. Merica Carev, M.D., PhD, clinical microbiology specialist
Associates from teaching bases</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>ME</td><td>LE</td><td>T</td></tr>
<tr><td>20</td><td>10</td><td></td><td></td><td></td></tr>
<tr><td>Status of the course</td><td>Mandatory</td><td>Percentage of application of e-learning</td><td colspan="4">Up to 10%</td></tr>
<tr><td colspan="7">COURSE DESCRIPTION</td></tr>
<tr><td>Objectives of the course</td><td colspan="6">1. To introduce students to the basics of microbiology and parasitology
2. To present students the biological properties of microorganisms that cause infections
3. To introduce students modes of infection transmitting caused by microorganisms
4. To present students human defend modes against infections
5. To present students methods for treating infectious diseases
6. To enable students to accept the principles of proper and safe laboratory work
7. To present students the methods of prevention of nosocomial infections</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="6">No requirements</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">After completing the course student will be able to:
- To identify and explain the biological properties of microorganisms that cause infectious diseases in humans, their pathogenicity factors and modes of transmission
- To use the acquired knowledge on the basics of human defense against infection
- To learn the mode of action of antimicrobial agents and the mechanisms of resistance of microorganisms to these agents
- To recognize and apply the basic principles of proper and safe laboratory work
- To apply disinfection and sterilization methods
- To explain and apply methods of prevention of nosocomial infections
- To explain the basics of laboratory diagnostics of pathogenic microorganisms and parasites
- To distinguish types of samples for microbiological processing, and apply the correct selection of individual types of samples from various organic systems
- To apply the acquired knowledge in the proper transport of the sample to the microbiological laboratory</td></tr>
</table>

Course content broken down in detail by weekly class schedule (syllabus)

Form of teaching	Thematic units:	Number of student hours
P1	Introduction to medical microbiology. Primarily sterile clinical specimens. Primarily non-sterile clinical specimens.	3
P2	Disinfection and sterilization. Nosocomial infections. Control of nosocomial infections. Isolation measures.	2
P3	Nonspecific and specific immunity. Humoral and cellular immunity. Primary and secondary immune response.	2
P4	Bacterial infections of organ systems.	3
S1	Collection of clinical material, transport, storage until seeding on nutrient media. Proper completion of accompanying referrals. Methods of direct bacteriological diagnostics.	2
P5	Antimicrobial drugs.	2
S2	Bacterial susceptibility testing to antimicrobial agents	2
P6	Basic morphological characteristics of fungi. Diseases caused by fungi. Hospital infections caused by fungi.	2
S3	Collection of clinical material for mycological diagnosis. Transport and storage. Laboratory diagnosis of mycosis.	2
P7	General properties of parasites. Parasites important in human pathology.	3
S4	Collecting of clinical material for parasitological diagnosis. Transport and storage. Methods of parasitological diagnostics.	2
P8	General properties of the viruses. Viruses that cause diseases in humans. Methods of virological diagnosis. Viral nosocomial infections.	3
S5	Virological diagnostics (collecting of clinical material for direct and indirect diagnosis, transport and storage). Virus isolation systems. Serological and molecular methods in microbiology.	2

Format of instruction:

☒lectures
☒seminars and workshops
☐exercises
☐*on line* in entirety
☒partial e-learning
☐field work
☐independent assignments
☐multimedia
☐laboratory
☐work with mentor
☐ (other)

Student responsibilities

Attend classes ordinarily.
Actively participate in teaching activities.
Own an active password for AAI @ EduHr electronic identity (for access to e-learning)

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course):*

Class attendance	0,2	Research		Practical training	
Experimental work		Report		(other)	
Essay		Seminar essay		(other)	
Tests		Oral exam		(other)	
Written exam	1,8	Project		(other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Performance (points)	Rating share (%)
Attendance and activity at lectures and seminars for 100% attendance	10	10.00
Written exam	90	90.00

	Total	**100**	**100.00**

RATIO OF SUCCESS AND EVALUATION

Achieved success percentage (%)	Criterion	Mark
60 – 70.9	meets the minimum criteria	sufficient (2)
71 – 80.9	average success	good (3)
81 – 90.9	above-average success	very good (4)
91 - 100	exceptional success	excellent (5)

	Title	**Number of copies in the library**	**Availability via other media**
Required literature (available in the library and via other media)	Written materials (handouts) from lectures.		on the website Merlin platform Course Clinical microbiology
	Kalenić S i sur.. Medicinska mikrobiologija. 2. izd. Zagreb:Medicinska naklada, 2019.		
	Richter B. Medicinska parasitologija. 6. izd. Merkur A.B.D., 2002.		
	Presečki V i sur. Virologija. Zagreb: Medicinska naklada; 2002.		
Optional literature (at the time of submission of study programme proposal)	Tonkić M., Dobec M., Abram M. i sur. Jawetz,Melnick & Adelberg Medicinska mikrobiologija. Split: Placebo, 2015. Uzunović-Kamberović S, ur. Medicinska mikrobiologija. Zenica : Štamparija Fojnica, 2009.		
Quality assurance methods that ensure the acquisition of exit competences	1. Teaching quality analysis by students and teachers 2. Exam passing rate analysis 3. Committee for control of teaching reports 4. External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Pharmacology					
Code	**ZSZ628**	Year of study	2.			
Course teacher	Mladen Boban, MD Full Professor	Credits (ECTS)	2.			
Associate teachers	Ivana Mudnić, Associate Professor Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			28	8		
Status of the course	Mandatory	Percentage of application of e-learning	Up to 20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course students will be able to: - explain the basics of pharmacology, the importance of recognising unwanted effects of drugs in the context of a competent member of the healthcare team, correct provision of information to the patient and possibilities of timely intervention - explain the basic pharmacological concepts, mechanisms of action of drugs, pharmacological response factors, and the particularities of application of drugs in individual organ disorders - differentiate between the desired and harmful effects of drugs, and understand the basic pharmacokinetics and pharmacodynamics of drugs most commonly used in their field of work - identify pharmacokinetics and pharmacodynamics of major drug categories - recognize the expected effects of drugs they encounter in their daily work, their side-effects and interactions

Course content broken down in detail by weekly class schedule (syllabus)	Type of instruction	Subject	Number of hours
	L, E	General pharmacology	3,1
	L, E	Drug research and clinical trials	3,1
	L, E	Antimicrobial drugs	4,1
	L, E	Allergic reactions	3,1
	L, E	Drug toxicity	3,1
	L, E	Analgesics and the pharmacology of pain	4,1
	L, E	Application of drugs in individual organ disorders (cardiovascular, digestive, central and autonomous nervous system and kidneys);	5,1
	L, E	Application of drugs during pregnancy and lactation.	3,1

Format of instruction		
	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the*						
	Class attendance	0,2	Research		Practical training	

<table>
<tr><td rowspan="4">proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td></td><td colspan="2">(Other)</td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td colspan="2">(Other)</td></tr>
<tr><td>Written exam</td><td>1,8</td><td>Project</td><td></td><td colspan="2">(Other)</td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><td>Verification indicators</td><td>Success (points)</td><td>Rating share (%)</td></tr>
<tr><td>Class attendance</td><td>5</td><td>10</td></tr>
<tr><td>Written exam</td><td>45</td><td>90</td></tr>
<tr><td>Total</td><td>50</td><td>100</td></tr>
</table>
RATIO OF SUCCESS AND EVALUATION
<table>
<tr><td>Achieved success percentage (%)</td><td>Criterion</td><td>Rating</td></tr>
<tr><td>60-69,9</td><td>meets minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80-89,9</td><td>above average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>outstanding success</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td rowspan="2">Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="3">Abstracts of lectures and exercises, (textbook in preparation)</td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">Bulat, M., Geber, J., Lacković, Z. Medicinska farmakologija. Zagreb, Medicinska naklada, 2001.
Farmakologija, Rang HP,Dale MM,Ritter JM, Moore PK (urednici), Golden Marketing, Zagreb, 2006.
Pharmacology in Nursing, McKerny&Salerno (urednici), Mosby, StLouis, 2003.</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Radiological Devices and Equipment					
Code	**ZSR639**	Year of study	2.			
Course teacher	Stipan Janković, MD, PhD, Full professor with tenure	Credits (ECTS)	6			
Associate teachers	Matijas Tatjana, master of radiological technology, lecturer Associates in the field of radiological technology	Type of instruction (number of hours)	L	S	CE	T
			25	10	85	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: 1. Describe history of radiological devices, 2. Describe technological development, 3. Describe types of energy used in radiological equipment, 4. Describe technical characteristics of radiological equipment used for diagnostic and therapeutic purposes, 5. Describe associated equipment, 6. Describe infrastructure necessary for installation and use of radiological equipment

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P1-2	Historical information on radiological devices	2
P3-4	Technological development	2
P5-6	Forms of energy used in radiological devices	2
P7-15	Technical characteristics of the latest radiological devices and equipment used for diagnostic purposes	9
P16-19	Technical characteristics of the latest radiological devices and equipment used for therapeutic purposes	4
P20-23	View of the latest radiological equipment	4
P24-25	Infrastructure necessary for installation and use of radiological devices	2
S1-2	Topics of seminar papers and instructions and method of presentation	2
S2-10	Submission and presentation of seminar papers, discussions on a given topic	8
KL1-85	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology and Polyclinic Medikol through the application of knowledge acquired throughout the course Radiological devices and equipment.	85

Format of instruction		
	■ lectures ■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises

Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0.6	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	5.4	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	54	90
Seminar assignment (presentation…)	6	10
Total	**60**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Janković S, Eterović D. Fizikalne osnove i klinički aspekti medicinske dijagnostike. Zagreb: Medicinska naklada, 2002.		
	Janković S, Mihanović F, Punda A, Radović D, Barić A, Hrepić D. Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini. Split, 2015.		
	Hebrang. A, Lovrenčić M. Radiologija. Zagreb: Medicinska naklada, 2000.		

Optional literature (at the time of submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.

NAME OF THE COURSE	Radiological Vocabulary and Standards				
Code	**ZSR608**	Year of study	2.		
Course teacher	Assistant professor Sanja Lovrić Kojundžić	Credits (ECTS)	1		
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			14		15	10
Status of the course	Mandatory	Percentage of application of e-learning	10 %			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able to: • Describe professional medical and technical terms with etymological and practical significance, • Describe groups of terms and terms in alphabetical order in radiological dictionary

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Theme	No of student hours
P1	Introduction to radiological vocabulary. Dictionary of terms used in classical radiology	
S1	Medical terminology	
P2	Medical terms related to ionizing radiation	
S2	Anatomical dictionary. Dictionary of diagnostic methods	
P3	Glossary of terms used in magnetic resonance imaging	
S3	Abbreviations and terms used in magnetic resonance imaging	
P4	Radiological standards	
S4	Repetition of the most important radiological phenomena	

Format of instruction	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training	
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam		(Other)	
Written exam		Project		(Other)	

Grading and evaluating student	***IMPORTANT!!! (Minimum pass rate on the written test is 60% of correctly solved tasks, if the oral part of the exam is included in the test, then the minimum pass rate on the test is 50% of correctly solved tasks).

<table>
<tr><td>work in class and at the final exam</td><td>
<table>
<tr><th>Verification indicators</th><th>Performance (points)</th><th>Grade (%)</th></tr>
<tr><td>Written exam ***</td><td>40</td><td>100</td></tr>
<tr><td>Total</td><td>40</td><td>100</td></tr>
</table>
RATIO OF SUCCESS AND EVALUATION
<table>
<tr><th>Achieved success percentage (%)</th><th>Criterion</th><th>Evaluation</th></tr>
<tr><td>60-69,9</td><td>meets the minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80-89,9</td><td>above-average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>exceptional success</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td>
<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Marija Frković Radiološki stručni rječnik, Alka Script, 2011.</td><td></td><td></td></tr>
<tr><td>Medicinski leksikon. Leksikografski zavod Miroslav Krleža. Zagreb, 1992.</td><td></td><td></td></tr>
<tr><td>Roić, Klanfar, Frković: Radiološki stručni rječnik i norme. Zagreb, 2006.</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td></td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td>▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td></td></tr>
</table>

NAME OF THE COURSE	Skeletal Radiography					
Code	**ZSR609**	Year of study	2.			
Course teacher	Maja Marinović Guić, MD, PhD, Assistant Professor	Credits (ECTS)	10			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			10		130	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Passed Anatomy exam
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: - Analyse and interpret radiological referral data, - Conduct interviews with patients, prepare them for radiography, - Describe radiography equipment, - Describe and implement posture and position for radiography, - Determine the radiography field, use the collimator, - Determine the central X-ray beam entry point and centering - Describe and implement collimating x-ray beams to the examined part of the body and image receptor, - Describe and implement the patient immobilization - Describe and implement the patient protection against unnecessary radiation, - Label the image receptor and identify image data, - Evaluate radiographic presentation and identification of anatomical structures shown in the radiogram, - Identify type and origin of artefacts in the image, the method of avoiding and eliminating them, - Assess the technical and diagnostic value of radiographs, - Describe and implement radiographic presentation in standard, additional and modified projections of anatomical region, parts of bones and joints: head, trunk and limbs

Course content broken down in detail by weekly class schedule (syllabus)

Type	Topic	Number of student hours
L3, CE5	Introduction to skeletal radiography, Radiography of fingers	8
L3, CE5	Radiography of hand, radiocarpal joint, elbow and forearm	8
L3, CE5	Radiography of arm and shoulder joint	8
L2, CE5	Radiography of scapula and clavicle	7
CE6	Radiography of upper extremity	6
L2, CE6	Radiography of ribs and sternum	8
L2, CE6	Radiography of toes, foot, and calcaneus	8
L3, CE5	Radiography of ankle, leg, and patella	8
L2, CE6	Radiography of knee, thigh, and hips	8
CE5	Radiography of lower extremity	5
L3, CE5	Radiography of appendicular skeleton (repetition)	8
L3, CE5	Radiography of craniocervical junction and cervical spine	8
L3, CE5	Radiography of cervicothoracic junction, thoracic spine and thoracolumbar spine	8
L3, CE5	Radiography of lumbar and lumbosacral spine	8

	CE6	Radiography of spine and ribs (repetition)	6
	L3, CE5	Radiography of pelvic region	8
	L3, CE5	Radiography of head I (PA i Caldwell projection, lateral projection, AP i PA axial projection)	8
	L3, CE5	Radiography of head II (paranasal sinuses, orbit and facial bones)	8
	L3, CE5	Radiography on mandible, temporomandibular joint and temporal bone	8
	CE8	Radiography of head and pelvic region	8
	L3, CE5	Dental radiography	8
	CE7	Dental radiography	7
	L3	Radiography of head and spine (repetition)	3
	CE5	Radiography of head (repetition)	5
	CE5	Radiography of spine (repetition)	5

Format of instruction

X lectures
☐ seminars and workshops
X exercises
☐ *on line* in entirety
☐ partial e-learning
☐ field work
☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor
☐ (other)

Student responsibilities

Regular class attendance
Active participation in the teaching process
Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training	3
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam	2	(Other)	
Written exam	5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Pass on written exam: 60% of all questions should be answered correctly.

Type of assessment	Points	Percentage in final mark (%)
Written exam	80	50
Practical exam	48	30
Oral exam	32	20
Total	**160**	**100**

Notice: student can approach practical exam after successfully passed written exam**,** and he can approach oral exam after passing written and practical exam.

RATIO OF SUCCESS AND EVALUATION

Achieved success percentage (%)	Criterion	Evaluation
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above-average success	very good (4)
90-100	exceptional success	excellent (5)

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Lectures in pdf (teaching book is in preparation)		

Optional literature (at the time of submission of study programme proposal)	1. Miletić D. Skeletna radiografija, Glosa, Rijeka, 2008. 2. Bešenski N, Škegro N. Radiography of the Skeleton. Zagreb: Školska knjiga, 1978. 3. Ballinger P.W, Frank E.D: General anatomy and radiographic positioning terminology, Iz: Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologic procedures, Volume I pp 57-88, Mosby, St Louis 2003. 4. Ballinger P.W, Frank E.D: Upper limb, Shoulder girdle, Lower limb, Pelvis, Vertebral column and Bony thorax, Iz: Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologic procedures, Volume I pp 89-528, Mosby, St Louis 2003. 5. Ballinger P.W, Frank E.D: Skull, Facial bones, Paranasal sinuses and Temporal bone, Iz: Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologic procedures, Volume II pp 273 - 458, Mosby, St Louis 2003.
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Conventional Radiologic Methods					
Code	**ZSR610**	Year of study	2.			
Course teacher	Stipan Janković, MD, PhD, Full professor with tenure	Credits (ECTS)	3			
Associate teachers	Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			25	5	35	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, students will be able to: 1. Describe and implement conventional radiological methods in diagnosis of diseases of the thoracic organs, 2. Describe and implement conventional radiological methods in diagnosis of diseases of the abdominal organs, 3. Describe and implement conventional radiological methods in diagnosis of diseases of the biliary tract, 4. Describe and implement conventional radiological methods in diagnosis of diseases of the digestive system , 5. Describe and implement conventional radiological methods in diagnosis of diseases of the genitourinary system, 6. Describe and implement conventional radiological methods in diagnosis of diseases of the maxillofacial area, sinuses, teeth, 7. Describe and implement conventional radiological methods in diagnosis of diseases of the heart and blood vessels, 8. Describe and implement conventional radiological methods in diagnosis of diseases of the central nervous system, 9. Describe and implement conventional radiological methods in diagnosis of breast diseases.

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P1-2	Conventional radiological methods, techniques and procedures used in diagnostic radiology	2
P3-4	Indications and contraindications for conventional radiological methods	2
P5-6	Conventional radiological methods in diagnostics diseases of the thoracic organs	2
P7-8	Conventional radiological methods in diagnostics diseases of the abdominal organs	2
P9-10	Conventional radiological methods in diagnostics diseases of the biliary system	2

	P11-12	Conventional radiological methods in diagnostics diseases of the digestive system	2
	P13-14	Conventional radiological methods in diagnostics diseases of the urogenital system	2
	P15-16	Conventional radiological methods in diagnostics diseases of the maxillofacial area, sinuses, teeth	2
	P17-18	Conventional radiological methods in diagnostics cardiovascular disease	2
	P19-20	Conventional radiological methods in diagnostics diseases of the central nervous system	2
	P21-22	Conventional radiological methods in diagnosis of breast disease	2
	P23-24	The role of conventional diagnostic methods, their significance and relationship with complementary imaging diagnostic methods (Ultrasound, CT, MRI)	2
	P25	Comparative advantages and disadvantages of conventional radiological diagnostic methods in relation to other imaging diagnostic methods.	1
	S1-5	The role of radiological technologist in conventional radiological methods	5
	KL1-35	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired through the course of conventional radiological methods	35

Format of instruction	■ lectures ■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	60	100
Total	**60**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	

		60%	69,9%	sufficient (2)	
		70%	79,9%	good (3)	
		80%	89,9%	very good (4)	
		90%	100%	excellent (5)	

	Title	Number of copies in the library	Availability via other media
Required literature (available in the library and via other media)	Hebrang A, Lovrenčić M. Radiologija. Medicinska naklada, Zagreb 2001.		
	Mašković J. Konvencionalne radiološke metode 2005. (Autorizirana skripta)		
Optional literature (at the time of submission of study programme proposal)	Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologoc procedures, Volume I, II i III. Mosby, St Louis 2003.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90% 3. exercises - 100%		

NAME OF THE COURSE	Theories of Imaging					
Code	**ZSR612**	Year of study	2.			
Course teacher	Associate Professor Krešimir Dolić, MD, PhD	Credits (ECTS)	4			
Associate teachers	Mr. Sc. Darijo Radović, MD, senior lecturer Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases	Type of instruction (number of hours)	L	S	CE	
			30	5	35	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: 1. Define and explain the formation, transfer and a visual representation of radiological image, its documentation and storage, 2. Define and explain the peculiarities and specific characteristics of diagnostic image in all conventional and digital radiological methods, 3. State the criteria for evaluation of diagnostic and technical image quality, 4. Describe technical factors related to radiological devices, image receptor and systems for storage and transmission of images that affect its value 5. Understand work with devices used in various diagnostic methods of imaging and displaying

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
L	Radiography - history, latent image, attenuation of X-rays, image receptor, radiographic film, radiographic cassettes, radiographic grid, criteria for evaluation of radiographic image quality, the impact of focus and FFD on sharpness and resolution	2
L	Fluoroscopy - EPS, fluoroscopic image quality, fluorography, tv transfer of fluoroscopic image, reproduction, storage and digitization of video signal, TV camera, video recorder and multiformat camera,	2
L	Conventional tomography	1
L	Macroradiography, computer processing of digital image	3
L	Analog and digital mammography	2
L	Low-voltage and high-voltage imaging technique	1
L	Mobile x-ray imaging, modified imaging in the intensive care unit	1
L	Computed and digital radiography	3
L	Principles of CT imaging	3
L	Display and analysis of PET / CT images	4
L	Principles of MRI imaging	4
L	Ultrasound, B-mode and Doppler method imaging	2
L	DSA and DSCA - dynamic presentation of flow through the blood vessels	2

	S	The importance of the radiological technologist in the correct assessment of image quality in all imaging in radiology	5
	CE	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired in the theoretical part of the course	35

Format of instruction	■ lectures ■ seminars and workshops ■ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ■ work with mentor ■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	4	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	60	100
Total	**60**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the	**Title**	**Number of copies in the library**	**Availability via other media**

library and via other media)	Janković S, Eterović D: Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada,2002.		
	Hebrang. A, Lovrenčić M. Radiologija. Zagreb: Medicinska naklada, 2000.		
	Janković S, Mihanović F, Punda A, Radović D, Barić A, Hrepić D. Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini. Split, 2015.		
Optional literature (at the time of submission of study programme proposal)	Wetarlin K.J: Mobile radiography. Iz: Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologoc procedures, Volume III pp 233-264, Mosby, St Louis 2003. Ballinger P.W, Frank E.D: Tomography, Iz: Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologoc procedures, Volume III pp 305-328, Mosby, St Louis 2003.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.		

NAME OF THE COURSE	Radiologic Anatomy and Pathology					
Code	**ZSR613**	Year of study	2.			
Course teacher	Igor Borić, MD Assistant Professor	Credits (ECTS)	4			
Associate teachers	Maja Marinović Guić, MD Assistant Professor	Type of instruction (number of hours)	L	S	E	T
			22	5	43	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing this course students will be able to: - Recognize the examined part of the body, - Assess technical and aesthetic image quality, - Recognize the correlation between normal and radiologic anatomy, - Identify variations in development, body constitution, age and gender of various anatomical structures of the body, - Describe different methods of radiological imaging of anatomical structures of the body, - Describe the algorithms of radiological examinations in imaging various anatomical structures and pathological changes of the body, - Recognize basic pathological changes examined by different radiological methods.
Course content broken down in detail by weekly class schedule (syllabus)	- Theoretical and practical knowledge of normal and pathological radiological anatomy of the body - Examining the anatomical structures of the body by different radiological diagnostic methods - Conventional native and contrast radiography, computed tomography (CT), - Ultrasound, - Magnetic resonance (MRI), - Assessment of the radiological image quality considering anatomical variations in the development, differences in constitution, age and gender.
Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor X clinical skills
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	1,5	Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,5	(Other)	
	Colloquium		Oral exam	1,6	(Other)	
	Written exam	0,4	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Bešenski N, Škegro N.: Radiološka tehnika skeleta, Školska knjiga, Zagreb, 1987		
	Agbaba M, Lovrenčić M.: Radiologija, Medicinska naklada Zagreb, 1994.		
	Keros P. Ustrojstvo čovjekova tijela, Zagreb, 1997.		
	Leonard H, Kahle W, Platzer W: Priručni anatomski atlas, Medicinska naklada, Zagreb, 1990.		
	Borić I. Radiološka anatomija – priručni atlas i nastavni tekst, Merlin platforma		
	Teaching materials and ppt presentations posted on the Merlin platform		
Optional literature (at the time of submission of study programme proposal)	Moeller TB.: Normal Findings in Radiography, Tieme Verlag, Stuttgart, 2000. Moeller TB, Reif E.: Pocket Atlas of Cross-Sectional Anatomy, Tieme Verlag, Stuttgart, 2000.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Internal Medicine				
Code	**ZSR614**	Year of study	2.		
Course teacher	Višnja Kokić Maleš, MD Assistant Professor	Credits (ECTS)	2		
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			20	10	20	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%		

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: - Implement new knowledge in internal medicine, - Describe the modern achievements in all parts of internal medicine, - Understand the theoretical basis of each diagnostic and therapeutic procedure.
Course content broken down in detail by weekly class schedule (syllabus)	Diseases of the following systems: cardiovascular, respiratory, gastrointestinal, endocrine, uropoietic, hematopoietic, immune, and bone, joints and connective tissue diseases, and metabolic disorders.

Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor X clinical skills
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Colloquium		Oral exam		(Other)	
	Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Božidar Vrhovac i suradnici, Interna medicina, II izdanje, Naklada Ljevak Zagreb, 2000.		
	Teaching materials and ppt presentations posted on the Merlin platform		

Optional literature (at the time of	

submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Surgery and Traumatology				
Code	**ZSR616**	Year of study	2.		
Course teacher	Zenon Pogorelić, MD Associate Professor	Credits (ECTS)	2		
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			20	10	5	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	- Apply basic theoretical knowledge of surgical pathophysiology, clinical picture and diagnostic procedures, indications and contraindications for treatment of the most common surgical diseases, - Identify possible intraoperative and postoperative complications in the treatment of the most common surgical diseases, - Identify the benefits of invasive radiological procedures in diagnosis and treatment of surgical and trauma diseases.
Course content broken down in detail by weekly class schedule (syllabus)	Basic knowledge of surgical pathophysiology, pre-operative and post-operative treatment of patients; acquisition of general surgical principles and specific procedures in certain fields of surgery and traumatology; the basics of invasive radiological procedures in diagnosis and treatment of surgical and traumatology diseases
Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor X clinical skills
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Colloquium		Oral exam		(Other)	
	Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Prpić I. i suradnici. Kirurgija za više medicinske sestre. Školska knjiga, Zagreb, 1995.		

	Teaching materials and ppt presentations posted on the Merlin platform		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Contrast Media					
Code	**ZSR617**	Year of study	2			
Course teacher	Danijela Budimir Mršić, MD, PhD, lecturer	Credits (ECTS)	1			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			8		12	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completed course student will be able to: 1. Describe theoretical basis of physical principle of absorption of X-ray in atoms of contrast media and the basics of biochemistry and pharmacokinetics of contrast media, 2. Describe barium sulfate and iodinated contrast agents, their pharmacokinetics and safety of application, 3. Develop rational and critical thinking when selecting a contrast medium for a particular diagnostic test, 4. Understand the basic principles of physiochemical properties, use and application of ultrasound and magnetic resonance contrast media 5. Describe recognition of adverse reactions to contrast media and their management

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Theme	Nr of student hours
L1	Historical development of contrast media, physical principle of X-ray absorption in atoms of contrast media, negative and positive contrast media	1
L2	Fundamentals of biochemistry and pharmacokinetics of contrast media	1
L3	Barium sulphate as a contrast medium: chemical structure, pharmacological forms, double contrast technique, toxicity, indications and contraindications, precautions	1
L4	Water-soluble iodine contrast media: ionic and nonionic, chemical structure, pharmacological forms, application, excretion	1
L5	Toxicity of the iodine contrast media: osmolality, side effects on kidneys and other organs	1
L6	Allergic and non-allergic adverse reactions to contrast media: patient's risk factors, mechanism of occurrence, clinical presentation, premedication, first aid, therapy	1
L7	Contrast media in ultrasound diagnostics, development, mechanism of action, indications, side effects	1
L8	Contrast media in magnetic resonance imaging, development, mechanism of action, indications, side effects	1
CP	Acquiring professional skills in the teaching base of Clinical Hospital Centre Split at the Clinical Department of Diagnostic and Interventional Radiology by applying the acquired knowledge about contrast media.	12

Format of instruction	x☐ lectures ☐ seminars and workshops x☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0,05	Research		Practical training	
	Experimental work	0,15	Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam	0,25	(Other)	
	Written exam	0,55	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Contribution in grade (%)
Attendance and activity at lectures for 100% attendance	5	5
Experimental work (clinical practice)	15	15
Written exam	55	55
Oral exam	25	25
Total	**100**	**100**

Success ratio

Achieved success, percentage (%)	Criterion	Grade
60-69,9	meets the minimum criteria	Sufficient (2)
70-79,9	average success	Good (3)
80-89,9	above-average success	Very good (4)
90-100	exceptional success	Excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
1. Brnić Z: Contrast Media, Zagreb: Knjižara Ljevak, 2015		
2. Hebrang. A, Lovrenčić M. Radiology. Zagreb: Medicinska naklada, 2000.		

Optional literature (at the time of submission of study programme proposal)	Review papers from Medical Research Databases

Quality assurance methods that ensure the acquisition of exit competences	Regularity of attending classes: 1. lectures - at least 80% 2. clinical practice – 100% 3. active participation in classes
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Computers in Radiology					
Code	**ZSR618**	Year of study	2.			
Course teacher	Frane Mihanović, PhD, assistant prof.	Credits (ECTS)	3			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			10	10	35	
Status of the course	Mandatory	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: -Describe the structure of computers, -Describe the peripherals connected to the computer and their mode of operation, -Describe the operating systems, -Describe the meaning of programming languages, -Describe development of computers, -Describe connection between computer and Picture Archiving and Communication Systems (PACS) of different modalities CT, MRI, DSA, ultrasound, PET.

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
P	- A brief historical development of computers, the division of computers and a review of special computers used for the reception and analysis of digital medical images. - Examples of medical imaging using ionizing radiation. - Number systems and their connection to computers. Transitions from one number system to another and performing arithmetic operations in different systems. - Performances of basic electronic elements that build computer elements	2
P	- CPU structure, block diagrams, speeds. The role of motherboards in computers and the most important elements that build it. The role of different slots, buses, ROM shapes. - Concepts of physical and logical interfaces and their importance. in communication with the user and computer parts. - Peripheral devices that are important for digital image processing and their properties: screens, printers, scanners. Lower and higher programming languages, operating systems, applications and tools. Structures of programming languages and explanation of lexical and syntactic rules, phases of program creation.	2
P	- Ways of shaping analog voltage signals from detectors and converting them into digital ones. Types of analog-to-digital (ADC) converters and where we encounter them in the digital image reception process. - The ratio of digital and analog images. Mathematical definitions. Analog distribution sampling. Spatial and frequency domain concept.	2

		- Influence of different parameters on digital image resolution. - Image digitization, digital image enhancement procedures and image degradation removal procedures, filter selection and morphological image operators. - Principles of analytical reconstruction of CT images, ways of displaying CT images and processing. Artifacts, causes and their removal.	
	P	- Image reception mechanism in digital fluorography. Characteristics of individual elements and their impact on image quality. - The mechanism of image reception in computer radiography. Flat panel detectors and digital images obtained with this modality. - Modulation transfer function of digital radiology imaging system and quantum detection efficiency. - Digital subtraction angiography (DSA), image reception technology and the main categories of digital image processing created in DSA.	2
	P	- Radiation sources in positron emission tomography (PET) - Gamma radiation detectors and method of recording projection data. Understanding sinogram creation, filtering projections and reconstructions. - Attenuation, scattered radiation correction, sensitivity in PET. - Clinical applications of PET and imaging methods: 2D, dynamic, reconstruction - Clinical applications of MR and imaging methods: 2D, dynamic, reconstruction	2
	S	Topics of seminar papers and instructions and method of presentation	2
	S	Submission and presentation of seminar papers, discussions	8
	E	- DICOM browser, specifics and differences - Work with DICOM browser - RIS application, introduction to medical data, - Structure and connectivity of data and computers - Meaning in practice of the concepts of entities and attributes - PACS system (show, describe the mode of operation) - Digital image generating devices (show CT with workstation) - Workstations with the device (show Wizard on CT and MR, functionalities and applications) - The process of work and data entry - Diagram of database, reports	35

Format of instruction	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor x Clinical skills (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the*	Class attendance		Research		Practical training	4

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work		Report			
	Essay		Seminar essay	0,9	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	2,1	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	56	70
Seminar assignment (presentation…)	24	30
Total	**80**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Tomislav Bokulić, mr.sci -Uvod u računala; Obrada digitalne slike; Primjenjene oslikavajuće tehnologije		

Optional literature (at the time of submission of study programme proposal)

Mikroračunala, Školska knjiga, Zagreb,1991.;
Uvod u osobna računala, Z. Vistrička, Zagreb 1992.;
Nuklearna medicina, urednici Z.Kusić, D. Ivančević, D. Dodig.;
Applied Imaging Technology, JCP Heggie, NA Liddell, KP Maher. 2001, St. Vincent's Hospital Melbourne.;

Quality assurance methods that ensure the acquisition of exit competences

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

Other (as the proposer wishes to add)

NAME OF THE COURSE	Clinical Practice II					
Code	**ZSR619**	Year of study	2.			
Course teacher	Frane Mihanović, PhD, ass. prof.	Credits (ECTS)	8			
Associate teachers	Tatjana Matijaš, master of radiological technology, lecturer., Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			5	20	145	
Status of the course	Mandatory	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Passed Clinical Practice I
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: -Apply knowledge acquired by performing imaging of bones and joints, -Apply knowledge acquired by performing imaging of bones of the head and face, -Apply knowledge acquired by performing imaging of thorax, -Apply knowledge acquired by performing imaging of abdomen and abdominal organs, -Apply knowledge acquired by performing imaging of uropoetic system,

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
P1-5	Techniques of imaging bones and joints, head and face, thorax, abdomen and abdominal organs and uropoietic system.	5
S1-2	Topics of seminar papers and instructions and method of presentation	2
S3-15	Submission and presentation of seminar papers	13
S16-20	Discussions on a given topic	5
E	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired according to the plan and program listed in the Clinical Skills Booklet	145

Format of instruction	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	x independent assignments ☐ multimedia ☐ laboratory x work with mentor x practical work (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the*						
	Class attendance		Research		Practical training	5
	Experimental work		Report			
	Essay		Seminar essay	2	(Other)	
	Tests		Oral exam	1	(Other)	

ECTS value of the course)	Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Seminar assignment (presentation…)	25	25
Oral exam	12,5	12,5
Practical work	62,6	62,6
Total	**100**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
Hebrang A, Lovrenčić M. Radiologija. Medicinska naklada, Zagreb 2001.		
Mašković J. Konvencionalne radiološke metode 2005. (Autorizirana skripta)		
Janković S, Mihanović F, Punda A, Radović D, Barić A, Hrepić D. Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini. Split, 2015.		

Optional literature (at the time of submission of study programme proposal)

Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologoc procedures, Volume I, II i III. Mosby, St Louis 2003.

Quality assurance methods that ensure the acquisition of exit competences

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

Other (as the proposer wishes to add)

NAME OF THE COURSE	Radiological Methods in Special Working Fields					
Code	**ZSR611**	Year of study	2.			
Course teacher	Assistant professor Sanja Lovrić Kojundžić	Credits (ECTS)	2			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			14		15	10
Status of the course	Elective	Percentage of application of e-learning	10 %			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able to: • Describe the methodology and strategy of radiological examination of patients who are not able to participate in method with their contribution • Describe the choice of modified projections as additional options radiographic imaging • Describe the type of communication and choice of approach to the patient who refuses to cooperate or does not show a tendency to cooperate in radiological examination • Describe the choice of radiographic equipment and film exposure conditions in non-standard search management • Describe the legal religious and ethical aspects of working with patients over whom a modification of the radiological method is applied • Describe the relationship with parents, guardians or companions in cases of radiological examination modification • Describe assisted radiological methods and relationships with members other medical professions participating in the modified radiological examination

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Theme	No of student hours
P1	Methodology and strategy of radiological examination of patients who are not able to participate by their own contribution to the examination	3
V1	Selection of modified projections in radiography	7
P2	The type of communication and the choice of approach to the patient who refuses to cooperate or does not show a tendency to cooperate in radiological examination	3
V2	Selection of radiographic equipment and conditions of film exposure in non-standard search conduct	7
P3	Legal, religious and ethical aspects of working with patients over whom a modification of the radiological method is applied	3
V3	Relationship with parents, guardians or companions in cases of modification of radiological examination	7

Format of instruction		
	X lectures ☐ seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning.	

<table>
<tr><td rowspan="6">Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,2</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,8</td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>1</td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td></td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td></td><td colspan="6"></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><td>Verification indicators</td><td>Performance (points)</td><td>Grading (%)</td></tr>
<tr><td>Written exam</td><td>26</td><td>10</td></tr>
<tr><td>In total</td><td>26</td><td>100</td></tr>
</table>
RATIO OF SUCESS AND EVALUATION
<table>
<tr><td>Achieved success percentage (%)</td><td>Criterion</td><td>Evaluation</td></tr>
<tr><td>60-69,9</td><td>meets the minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
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<tr><td>90-100</td><td>exceptional success</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td rowspan="6">Required literature (available in the library and via other media)</td><td colspan="4">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td colspan="4">Klanfar Z. Radiološka tehnologija u praksi. Zagreb: Naklada Slap 2009</td><td></td><td></td></tr>
<tr><td colspan="4">Hebrang. A, Lovrenčić M. Radiologija. Zagreb: Medicinska naklada, 2000.</td><td></td><td></td></tr>
<tr><td colspan="4">Mašković J. Radiološki postupci u posebne grupe bolesnika i posebnim uvjetima (Autorizirana skripta 2004)</td><td></td><td></td></tr>
<tr><td colspan="4">Lecture materials</td><td></td><td></td></tr>
<tr><td colspan="4"></td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6"></td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Application of Radiography in Other Fields					
Code	**ZSR635**	Year of study	2.			
Course teacher	Frane Mihanović, PhD, assistant prof.	Credits (ECTS)	2			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
			10	8	21	
Status of the course	Elective	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: Describe the application of radiography in conservation-restoration Describe radiological devices and their application in conservation and restoration Use software to analyze the obtained digital radiographic images Describe the possibilities of digital radiographic recordings in the area easel painting and polychrome wood Describe the possibilities of digital radiographic recordings in the field of stone and plaster Describe the possibilities of digital radiographic recordings in the field of metals Describe the possibilities of digital radiographic recordings in others areas of other medical professions involved in modified radiological examination

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
P	Introduction to the Application of Radiography in Other Areas Application of radiography in other areas	4
P	Radiological devices - application in conservation, restoration Micro CT Portable X-ray devices Software for analysis of obtained digital radiographic images Digital radiographic recordings of easel painting and polychrome wood Digital radiographic imaging of stone Digital radiographic recordings of metals Digital radiographic recordings in other areas Paleoradiology	6
S	Topics of seminar papers and instructions and method of presentation	2
S	Submission and presentation of seminar papers, discussions	6
E	Working with DICOM browser Art paintings on wood and canvas Wooden sculptures Metal objects Ceramic items Other materials (paper, ivory, etc.) 2D image representation in conservation restoration 3D image representation in conservation restoration	21

		Possibility of radiographic painting in wall painting Software tools for application in restoration Application of CT in the restoration of wooden sculptures 3D scanning of cultural assets Connection - integration of images into a whole CT volumetry, ROI Radiographic recordings in other areas Application in industry and research Application of radiography in conservation-restoration	

Format of instruction	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia X laboratory ☐ work with mentor x Clinical skills (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay	0,6	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1,4	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	56	70
Seminar assignment (presentation…)	24	30
Total	**80**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Radiography of Cultural Material, Janet Lang, Andrew Middleton (2005.)		
	Presentations and teaching materials from the web		

Optional literature (at the time of submission of study programme proposal)	http://www.heritagescience.ac.uk/Research_Projects/projects/CRS/Martin http://www.ncbi.nlm.nih.gov/pubmed/
Quality assurance methods that ensure	▪ Teaching quality analysis by students and teachers

the acquisition of exit competences	▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Emergencies in Medicine					
Code	**ZSZ630**	Year of study	3			
Course teacher	Mihajlo Lojpur, M.D., Ph.D, Assistant Professor	Credits (ECTS)	2			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			18		25	
Status of the course	Mandatory	Percentage of application of e-learning	20%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	The student will be trained in basic resuscitation skills and work in the intensive care unit and: 1. Supervise the functions of vital organs and recognize development of life-threatening situation, 2. Evaluate patient's condition and take appropriate emergency measures in typical emergencies, 3. Implement emergency procedures for dealing with vital organ failure, 4. Apply BLS and ALS resuscitation protocol, 5. Identify life-threatening arrhythmias and apply AED if necessary. 6. Establish and maintain a patent airway, 7. Administer oxygen, 8. Establish peripheral and/or intraosseous venous access, 9. Use parenteral drugs, infusion solutions and blood derivatives 10. Recognize the occurrence and type of complications during diagnostic or other medical procedures in life-threatening patients, and apply emergency procedures and treatment if they occur

Course content broken down in detail by weekly class schedule (syllabus)

Form of teaching	Topics	Hours
L	1. Monitoring of vital functions of the organism	1
L	2. Essential medicines in emergencies	1
L	3. Acute poisoning	1
L	4. Treatment of acute pain	1
L	5. Resuscitation of children	1
L	6. Acute failure of vital organ systems	2
L	7. Shock, Anaphylactic shock	1
L	8. Fluid replacement	1
L	9. Basics of mechanical ventilation	2
L	10. Blood replacement	1
L	11. Adult resuscitation	2
L	12. Acute coronary syndrome	1
L	13. Injury care, Burns	2
L	14. Identification of patients requiring urgent treatment	1
E	1. Airway and oxygen administration	5
E	2. Resuscitation (BLS modified for hospital conditions + scenarios)	5
E	3. Patient monitoring, cardiac arrhythmias, defibrillation and electroconversion	5
E	4. Initial care of the injured	5

	E	5. Iv and intraosseous route, administration of drugs, infusion solutions and blood	5

Format of instruction	☐ √ **lectures** ☐ √ **seminars and workshops** ☐ √ **exercises** ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ √ **work with mentor** ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report		**Mastering skills in exercises**	1
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	1	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Written exam:

Achieved success (%)	**Description of acquired knowledge**	**Grade**
60-69,9	meets the minimum criteria	sufficient (2)
70-79,9	average success	good (3)
80-89,9	above-average success	very good (4)
90-100	remarkable success	excellent (5)

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Marko Jukić, Mladen Carev, Nenad Karanović, Mihajlo Lojpur. Anesthesiology and Intensive Care Medicine for students of medicine, dental medicine and health studies. Split: Faculty of Medicine, 2017. Chapters 1, 3, 10, 12, 15, 19, 20, 22, 25 and 28		Website of the School of Split
Mihajlo Lojpur. Cardiopulmonary resuscitation. In: Tanja Šimurina, Boris Mraović. General clinical anesthesiology and resuscitation. Zadar: University of Zadar, 2020; 379-446		
Gvožđak M, Tomljanović B. Basic emergency medical procedures. Croatian Chamber of Nurses, Croatian Institute of Emergency Medicine, Zagreb, 2011.		https://vub.hr/images/uploads/3209/hitni_medicinski_postupci_u_izvanbolnckim_uvjetima.pdf
Basic Clinical skills. In: Simunovic VJ: Catalogue of Clinical Skills. Seattle: CreateSpace Independent Publishing Platform; 2013. ISBN - 10: 1489580212.		

Optional literature (at the time of submission of study programme proposal)	

Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

<table>
<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">Computerised Tomography</td></tr>
<tr><td>Code</td><td>ZSR621</td><td>Year of study</td><td colspan="4">3.</td></tr>
<tr><td>Course teacher</td><td>Ivana Štula PhD, Assistant professor</td><td>Credits (ECTS)</td><td colspan="4">5</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2"></td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>T</td></tr>
<tr><td>25</td><td>10</td><td>50</td><td></td></tr>
<tr><td>Status of the course</td><td>Mandatory</td><td>Percentage of application of e-learning</td><td colspan="4">Up to 10%</td></tr>
<tr><td colspan="6">COURSE DESCRIPTION</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="5">Completed lectures and exercises in Radiological devices and equipment</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="5">After completing the course, students will be able to:
- Describe the history of CT, development and future proscpects,
- Describe the physical principles of CT operation,
- Describe the parts of CT and mode of operation,
Prepare and apply contrast agents in CT diagnostics (under supervision of the radiologist),
- Prepare the patients for a CT scan,
- Prepare and implement CT imaging, examinations and procedures,
- Use CT applications, 2D, 3D, and subsequently reconstruct the slices from "raw data".</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="5">All theoretical lectures will be accompanied by clinical exercises in order to train students for individual work.
Thematic units:

- the history of CT, development and future proscpects,
- the physical principles of CT operation,
- the parts of CT and mode of operation,
- reconstruction and reformation of CT images
- MDCT
- dual CT
- low dose computed tomography
- quality of CT images
- preparation and application of contrast agents in CT diagnostics,
pPreparation of patients for a CT scan,
- CT imaging, examinations and procedures,
- implement CT imaging by organ systems:
1. CT scan of the head and neck,
2. Thoracic CT scan,
3. CT of the abdomen,
4. CT of the pelvis,
5. CT of the musculosceletal system,
6. CT angiography,
7. CT-guided interventions,</td></tr>
<tr><td>Format of instruction</td><td colspan="3">X lectures
X seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="2">☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor
☐ (other)</td></tr>
</table>

Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0,2	Research		Practical training	1,5
	Experimental work		Report			
	Essay		Seminar essay	0,3	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Indicators of knowledge	Scoring Systems (point)	Percentage (%)
To be actively involved during course	4	4
Written exam***	60	60
For presentation of seminar theme	6	6
Practical exam	30	30
Total	**100**	**100**

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Class material of Computed Tomography		
Stipan Janković, Davor Eterović, Physical Principles and Clinical Aspects of Medical Diagnostics, Medicinska naklada		
Bushong SC.: Radiologic Science for Technologists. Mosby: phisycs, biology, and protection, ed 7. St. Louis, Mosby, 2001		
Hebrang A., Lovrenčić M. Radiology, Medicinska naklada, Zagreb, 2001.		
Mašković J, Cambj-Sapunar L Computed Tomography and Digital Radiography for Radiologic Technologists. (Autorizirana skripta) 2004.		
Petar Strugačevac Teorijska osnova Imaging CT tehnike,Gradska tiskara, Osijek 1999		

Optional literature (at the time of submission of study programme proposal)	Kelly LL: Computed Tomography.Iz Ballinger P.W, Frank E.D: Merrill´s atlas of radiographic positions and radiologic procedures, Volume III pp 329-355, Mosby, St Louis 2003
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Ultrasound Diagnostics					
Code	**DSR620**	Year of study	3.			
Course teacher	Igor Barišić, PhD, Assistant professor	Credits (ECTS)	1			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			6	4	10	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Completed lectures and exercises in Radiological devices and equipment
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: - Describe the historical overview of the development of ultrasound technology, - Describe the physical principles of operation and parts of the ultrasound devices, - Describe the use of ultrasound in gastroenterology, - Describe the use of ultrasound in examining genitourinary system, breast, thyroid gland, musculoskeletal system, - Describe the principle of colour Doppler of blood vessels, ultrasound-guided interventional procedures.

Course content broken down in detail by weekly class schedule (syllabus)

Form of teaching	Topics	Hours
L, E	Historical overview of the development of ultrasound technology	**3**
L, E	The physical principles of operation and parts of the ultrasound devices	3
L, S, E	The use of ultrasound in gastroenterology	4
L, S, E	The use of ultrasound in examining genitourinary system, breast, thyroid gland, musculoskeletal system	4
L, S, E	The principle of colour Doppler of blood vessels, ultrasound-guided interventional procedures.	6

Format of instruction		
	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training		
Experimental work		Report				
Essay		Seminar essay		(Other)		
Tests		Oral exam	0,5	(Other)		
Written exam	0,5	Project		(Other)		

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	30	50
Oral exam	30	50
Total	**60**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)

Title	**Number of copies in the library**	**Availability via other media**
Hebrang A., Lovrenčić M. Radiology, Medicinska naklada, Zagreb, 2001.		
Materials from lectures		

Optional literature (at the time of submission of study programme proposal)

Quality assurance methods that ensure the acquisition of exit competences

- Teaching quality analysis by students and teachers
- Exam passing rate analysis
- Committee for control of teaching reports
- External evaluation

Other (as the proposer wishes to add)

<table>
<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">DSA</td></tr>
<tr><td>Code</td><td>DSR622</td><td>Year of study</td><td colspan="4">3.</td></tr>
<tr><td>Course teacher</td><td>Tonći Batinić, PhD, Assistant professor</td><td>Credits (ECTS)</td><td colspan="4">3</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2">Associates from teaching basese</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>T</td></tr>
<tr><td>17</td><td>10</td><td>25</td><td></td></tr>
<tr><td>Status of the course</td><td>Mandatory</td><td>Percentage of application of e-learning</td><td colspan="4">Up to 10%</td></tr>
<tr><td colspan="6">COURSE DESCRIPTION</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="5">Completed lectures and exercises in Radiological devices and equipment</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="5">After completing the course, students will be able to:
- Describe the history of the development of DSA,
- Describe the physical principles of DSA devices,
- Plan and implement examinations by organ systems,
- Perform testing and storage of digital images,
- Describe the intervention possibilities,
- Describe the application of contrast agents.</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="5">- Introductory lecture on the historical overview of the development of DSA, comparison with conventional angiography,
- Working principle of DSA,
- Equipment, components of DSA device,
- The use of contrast agents,
- Indications and contraindications for examination,
- Preparation of patients for examination, and the role of radiologic technologists,
- Planning and implementing examinations by organ systems,
- Image processing,
- Printing and storage of images,
- Display of pathomorphological changes by organ systems:
1. The central nervous system
2. Neck
3. Thorax
4. Abdomen and pelvis
5. Extremities
- Review of the intervention possibilities,
- Possible complications,
- Exercises
- Under the guidance of radiologic technologists - mentors, students are trained to independently perform examinations,
- The programme of exercises corresponds to the content of lectures and seminars by answering the questions from everyday practical work on devices for computerized tomography, magnetic resonance imaging and digital subtraction angiography,
- Students are trained for successful communication with patients besides technical procedures for performing examinations.</td></tr>
<tr><td>Format of instruction</td><td colspan="2">X lectures
X seminars and workshops
X exercises
☐ on line in entirety</td><td colspan="3">☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor</td></tr>
</table>

	☐ partial e-learning ☐ field work	☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training	
Experimental work		Report			
Essay		Seminar essay		(Other)	
Tests		Oral exam		(Other)	
Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verification indicators	Success (points)	Part of grade (%)
Written exam	60	100
Total	**60**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
Hebrang A., Lovrenčić M. Radiology, Medicinska naklada, Zagreb, 2001.		
Mašković J, Cambj-Sapunar L: Interventional Radiology for Radiologic Technologists (Authorized manual) 2004.		
Mašković J, Janković S: Selected chapters of Interventional Radiology, Faculty of Medicine Split, 2008.		
Materials from lectures		

Optional literature (at the time of submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	MRI					
Code	**ZSR623**	Year of study	3.			
Course teacher	Associate Professor Krešimir Dolić, MD, PhD	Credits (ECTS)	5			
Associate teachers	Assistant Professor Frane Mihanović, MD, PhD Associates from teaching bases	Type of instruction (number of hours)	L	S	CE	
			25	10	50	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Completed lectures and exercises in Radiological devices and equipment
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: 1. Describe the historical overview, development of MRI methods and devices 2. Describe the physical principles of MRI, 3. Describe the parts of MRI and mode of operation, 4. Prepare and apply contrast agents in magnetic resonance imaging, 5. Prepare and implement MRI imaging of the patients, 6. Describe the indications and contraindications for examination, 7. Describe and implement MRI imaging in the diagnosis of individual organ systems diseases.

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Topic	Number of student hours
P	Historical overview, development of MR methods and devices	2
P	Physical principles of MR	2
P	Device parts and MR mode	10
P	Contrast agents in magnetic resonance imaging	2
P	Preparing patients for examination and the role of radiological technologist	2
P	Indications and contraindications	2
P	Performing of MR examination	5
S	MR in the diagnosis of diseases of individual organ systems: MR of the central nervous system MR door MR thorax - heart MR of abdomen and pelvis MR of the locomotor system MR angiography	10
CE	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology through the application of knowledge acquired about MRI.	50

Format of instruction		
	■ lectures	☐ independent assignments
	■ seminars and workshops	☐ multimedia
	■ exercises	☐ laboratory
	☐ *on line* in entirety	■ work with mentor

	☐ partial e-learning ☐ field work	■ clinical exercises
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning.	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

RATIO

Verification indicators	Success (points)	Part of grade (%)
Written exam	60	100
Total	**60**	**100**

OF

SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Stipan Janković, Davor Eterović, Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada		
	Hebrang A.,Lovrenčić M.: Radiologija, Medicinska naklada, Zagreb, 2001		
	Fučkan I: Magnetska rezonancija, TKO ZNA ZNA d.o.o.,2012.		
Optional literature (at the time of submission of study programme proposal)			

Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	Active class participation. Regularity of attending classes: 1. lectures - at least 80% of the total class time 2. seminars - at least 90%. 3. exercises - 100%.

NAME OF THE COURSE	New Technologies in Radiology					
Code	**ZSR624**	Year of study	3.			
Course teacher	Frane Mihanović, PhD, assistant prof.	Credits (ECTS)	3			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			5	10	35	
Status of the course	Mandatory	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course, the student will be able to: -Describe telemedicine, -Describe teleradiology, -Describe medical information technology, -Describe the modeling and simulation of physiological systems, -Describe medical imaging, -Apply medical image processing, -Describe artificial intelligence in medicine, -Describe new technologies in dentistry, -Describe the international standards.

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
P	Telemedicine	3
P	Teleradiology	2
P	Medical information technology	2
P	Modelling and simulation of physiological systems	1
P	Medical imaging	1
P	Medical image processing	2
P	Artificial intelligence in medicine	1
P	New technologies in dentistry	2
P	The international standardization	1
S	Topics of seminar papers and instructions and method of presentation	2
S	Submission and presentation of seminar papers, discussions	8
E	Digital image, computer networks, radiological computer programs, distance learning, databases,, "second" opinion, consulting opinion. Teleradiology, DICOM viewer, WEB viewer, 3D viewer, radiological workstation functionalities. Work on radiological image processing workstations Work with radiological applications in dental radiography, 2D and 3D viewers.	35

Format of instruction		
	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor x Clinical skills (other)

<table>
<tr><td>Student responsibilities</td><td colspan="6">Regular class attendance
Active participation in the teaching process
Password for AAI EduHr electronic identity to access e-learning.</td></tr>
<tr><td rowspan="6">Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td></td><td>Research</td><td></td><td>Practical training</td><td>4</td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,9</td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td></td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td>2,1</td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td></td><td colspan="6"></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><th>Verification indicators</th><th>Success (points)</th><th>Part of grade (%)</th></tr>
<tr><td>Written exam</td><td>56</td><td>70</td></tr>
<tr><td>Seminar assignment (presentation…)</td><td>24</td><td>30</td></tr>
<tr><td>Total</td><td>80</td><td>100</td></tr>
</table>
RATIO OF SUCCESS AND EVALUATION
<table>
<tr><th colspan="2">SUCCESS RATE ACHIEVED (%)</th><th>EVALUATION</th></tr>
<tr><th>FROM</th><th>TO</th><th></th></tr>
<tr><td>60%</td><td>69,9%</td><td>sufficient (2)</td></tr>
<tr><td>70%</td><td>79,9%</td><td>good (3)</td></tr>
<tr><td>80%</td><td>89,9%</td><td>very good (4)</td></tr>
<tr><td>90%</td><td>100%</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td colspan="3">Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td></td><td colspan="3">M. Medvedec: Nove tehnologije i računala, 2003.</td><td></td><td></td></tr>
<tr><td></td><td colspan="3"></td><td></td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6">M. Kiš: Englesko-hrvatski/hrvatsko-engleski informatički rječnik, Naklada Ljevak, Zagreb, 2000.
D.A. Downing, M.A. Covington, M.M. Covington: Dictionary of Computer and Internet Terms, Barron's Educational Series; 8th edition (February 2003)
www.gehealthcare.com; www.medical.philips.com; www.medical.siemens.com:; odabrani članci i web stranice</td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">▪ Teaching quality analysis by students and teachers
▪ Exam passing rate analysis
▪ Committee for control of teaching reports
▪ External evaluation</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

NAME OF THE COURSE	Interventional Radiology					
Code	**DSR626**	Year of study	3.			
Course teacher	Tonći Batinić, PhD, Assistant professor	Credits (ECTS)	3			
Associate teachers	Associates from teaching basese	Type of instruction (number of hours)	L	S	E	T
			17	10	25	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: Apply the knowledge acquired in collaboration with radiologists in performing complex interventional procedures such as neurointervention, angioplasty, stenting, stent grafting, embolization, and intra-arterial chemotherapy.
Course content broken down in detail by weekly class schedule (syllabus)	Managing angiographic devices such as angio-computers, - C-arch, - Automatic injectors, - Fixing minor equipment problems, - Preparing patients for intervention, - Preparing angiography suite for intervention, - Recording on radiological films and data archiving, - Maintaining reserves of intervention materials, - Participating in the procurement of materials and new equipment
Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Verification indicators	Success (points)	Part of grade (%)
	Written exam	60	100
	Total	**60**	**100**

	RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

	Title	**Number of copies in the library**	**Availability via other media**
Required literature (available in the library and via other media)	Hebrang A., Lovrenčić M. Radiology, Medicinska naklada, Zagreb, 2001.		
	Mašković J, Cambj-Sapunar L: Interventional Radiology for Radiologic Technologists (Authorized manual) 2004.		
	Mašković J, Janković S: Selected chapters of Interventional Radiology, Faculty of Medicine Split, 2008.		
	Materials from lectures		
	Hoballah J, Lumsden A: Vascular Surgery, ISBN 978-1-4471-2911-0 ISBN 978-1-4471-2912-7 (eBook) DOI 10.1007/978-1-4471-2912-7© Springer-Verlag London 2012		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

<table>
<tr><td>NAME OF THE COURSE</td><td colspan="5">Nuclear Medicine</td></tr>
<tr><td>Code</td><td>ZSR627</td><td>Year of study</td><td colspan="3">3.</td></tr>
<tr><td>Course teacher</td><td>Ante Punda, MD
Full Professor</td><td>Credits (ECTS)</td><td colspan="3">6</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2"></td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>T</td></tr>
<tr><td>30</td><td>20</td><td>60</td><td></td></tr>
<tr><td>Status of the course</td><td>Mandatory</td><td>Percentage of application of e-learning</td><td colspan="3">Up to 10%</td></tr>
<tr><td colspan="6">COURSE DESCRIPTION</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="5">No requirements</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="5">After completing the course the student will be able to:
- Describe the theoretical and practical aspects of applying nuclear medicine methods in oncology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in haematology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in cardiology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in nephrology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in urology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in gastroenterology,
- Describe the theoretical and practical aspects of applying nuclear medicine methods in endocrinology,
- Describe the procedures of SPECT imaging,
- Describe the procedures of SPECT / CT imaging,
- Describe the procedures of PET / CT imaging,
- Describe the calibrator dose, measurements and quality control procedures,
- Describe the scintillation detector: probe and "well" type detectors</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="5">- Theoretical and practical aspects of applying nuclear medicine methods in oncology,
- Theoretical and practical aspects of applying nuclear medicine methods in haematology,
- Theoretical and practical aspects of applying nuclear medicine methods in cardiology,
- Theoretical and practical aspects of applying nuclear medicine methods in nephrology,
- Theoretical and practical aspects of applying nuclear medicine methods in urology,
- Theoretical and practical aspects of applying nuclear medicine methods in gastroenterology,
- Theoretical and practical aspects of applying nuclear medicine methods in endocrinology,
- Procedures of SPECT imaging,
- Procedures of SPECT / CT imaging,
- Procedures of PET / CT imaging,
- Calibrator dose, measurements and quality control procedures,
- Scintillation detector: probe and "well" type detectors.</td></tr>
<tr><td>Format of instruction</td><td colspan="2">X lectures</td><td colspan="3">☐ independent assignments</td></tr>
</table>

	X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ multimedia ☐ laboratory ☐ work with mentor
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*	Class attendance	0,20	Research		Practical training	
	Experimental work	0,80	Report			
	Essay		Seminar essay	1	(Other)	
	Colloquium		Oral exam		(Other)	
	Written exam	4	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Written exam		
Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	Ivančević D (ur.) Klinička nuklerna medicina, Medicinska naklada, Zagreb 1999. Janković S. i sur. "Radiološki uređaji i oprema u Radiologiji, Radioterapiji i Nuklearnoj medicini", Sveučilište u Splitu, SOZS,2015.		
	Teaching materials and ppt presentations posted on the Merlin platform		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Radiotherapy and Oncology							
Code	**ZSR628**							
Study programme	Radiologic techonology	Year of study	3.					
Course teacher	Assist. prof. Tihana Boraska Jelavić, MD	Credits (ECTS)	6					
Associate teachers	Associates from teaching basese	Type of instruction (number of hours)	P	S	KL	PKL	IR	
			30	20	50	10		
Status of the course	Mandatory	Percentage of application of e-learning	do 10%					

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After finishing the course student will be able to: • describe basic facts about oncological treatment • describe the goals, methods and possibilities of oncological treatment • describe radiotherapy techniques • describe the use of citostatics that are combining with radiotherapy • describe the combined principles of treatment of the most common malignant diseases • describe the use of computers in radiotherapy, • describe how to use linear accelerator, • describe how to use CT simulator, • describe CT simulator • describe main components of radiotherapy devices and their function

Course content broken down in detail by weekly class schedule (syllabus)

Form of teaching	Theme	Hours
P1	Classification of malignant diseses and indications for radiotherapy	2
P2	Prevention and diagnostics of malignant diseases	1
P3	Possibilities and restrictions of radiotherapy treatment	2
P4	Combined principles of treatment of oncological diseases	3
P5	Use of citostatics that enhance radiotherapy	2
P6	Concomitantn chemoradiotherapy	2
P7	Adjuvant, neoadjuvant and palliative radiotherapy	3
P8	The importance of daily dose and continuity of radiotherapy	2
P9	Brachytherapy and external beam therapy	2
P10	Standard radiotherapy techniques (3D CRT and IMRT)	3
P11	Detection, follow-up and treatment of radiotherapy side-effects	3
P12	Modern radiotherapy techniques (tomotherapy, cyberknife, ion therapy...)	3
P13	Team work in radiotherapy team	1
P14	The future in treatment of oncological patients	1
S1	Biological effects of fractionated radiotherapy	3
S2	Concomitant chemobrachyradiotherapy	3
S3	Combined principles of treatment of tumors of digestive tract	3
S4	Combined principles of treatment of lung tumors	3

S5	Combined principles of treatment of head and neck tumors	3
S6	Standards and procedures of radiotherapy process	3
S7	Quality control of radiotherapy	2
KL1	CT planning of patients	20
KL2	Positioning and fixation of patients on simulator and therapy device	20
KL3	Contouring of organs-at-risk	10
PKL1	Detection and follow-up of radiotherapy side-effects	5
PKL2	CT planning, radiotherapy conductance and detection of radiotherapy undesired side effects	5

Format of instruction

☒ lectures	☐ independent assignments
☒ seminars and workshops	☐ multimedia
☒ exercises	☐ laboratory
☐ *on line* in entirety	☐ work with mentor
☒ partial e-learning	☒ Clinical skills
☐ field work	

Student responsibilities

To regularly attend the course
Active participation in course activities
Must have active AAI@EduHr electronic identity (to access e-learning)

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance	0.3	Research		Practical training	
Experimental work	0.6	Report			
Essay		Seminar essay	0.6	(Other)	
Tests		Oral exam	1.5	(Other)	
Written exam	3	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verfication indicators	Success *points(	Part of grade *%(
Class attendance	5	5
Experimental work	10	10
Written exam	50	50
Seminar essay	10	10
Oral exam	25	25
TOTAL	**100**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media))

Title	**Number of copies in the library**	**Availability via other media**
1. ppt presentations in PDF	/	On a web site MSTeams

			/Course Radiotherapy and Oncology
	2.Vrdoljak E, Belac Lovasić I, Kusić Z, Gugić D, Juretić A. Klinička onkologija. Medicinska naklada, Zagreb, 2018. (odabrana poglavlja)	/	Available at course leader on demand
	3.Šamija, Krajina, Purišić: RADIOTERAPIJA, Globus Zagreb 1996	/	Available at course leader on demand
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	It is necessery to attend: - lectures - minimally 80% of all lectures, - seminars 90% and practices 100%, - active course participation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Equipment and Workflow Quality Control					
Code	**DSR629**	Year of study	3.			
Course teacher	Ivana Štula PhD, Assistant professor	Credits (ECTS)	2			
Associate teachers	Associates from teaching basese	Type of instruction (number of hours)	L	S	E	T
			10	6	20	
Status of the course	Mandatory	Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: • Know a legal framework for quality control of radiology equipment and workflow • Know quality control tests for radiographic/ diascopic device, DSA and computed tomography • Independently perform quality control tests for radiographic/ diascopic device, DSA and computed tomography in domain of radiological technologist • Know quality control tests for radiotherapy device and the role of physicist in their quality control • Know quality control tests for nuclear medicine device and the role of radiological technologist in their quality control • Independently registered diagnostic and therapeutic procedure in radiologly
Course content broken down in detail by weekly class schedule (syllabus)	- Basic of equipment and workflow quality control - Quality control of computed tomography - Quality control of radiographic and diascopic device - Quality control in radiotherapy - Quality control in nuclear medicine

Format of instruction		
	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	1	Research		Practical training	0,25
	Experimental work		Report			
	Essay		Seminar essay	0,25	(Other)	
	Tests		Oral exam		(Other)	
	Written exam	0,50	Project		(Other)	

Grading and evaluating student	Indicators of knowledge	Scoring Systems (point)	Percentage (%)
	To be actively involved during course	6	10

work in class and at the final exam	Practical exam	15	25
	Written exam ***	30	50
	For presentation of seminar theme	9	15
	Total	**60**	**100**

	Title	**Number of copies in the library**	**Availability via other media**
Required literature (available in the library and via other media)	Class material of Equipment and Workflow Quality Control		
	Stipan Janković, Davor Eterović, Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada		
	Klanfar Z. : Radiological techniques,Visoka radiološka škola ; 1998,nastavni tekstovi		
	Hebrang A.,Lovrenčić M.: Radiology, Medicinska naklada, Zagreb, 2001.		

Optional literature (at the time of submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Clinical Practice III					
Code	**ZSR633**	Year of study	3.			
Course teacher	Frane Mihanović, PhD, assistant prof.	Credits (ECTS)	6			
Associate teachers	Tatjana Matijaš, master of radiological technology, Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			5	20	95	
Status of the course	Mandatory	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Passed Clinical practices II
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course student will be able to: -Apply acquired knowledge to work on modern diagnostic devices (US, Digital Radiography, CT, MRI, and DSA).

Course content broken down in detail by weekly class schedule (syllabus)

Format of instruction	Topic	Number of student hours
P	Work on modern diagnostic devices (ultrasound, digital radiography, CT, MR, DSA)	5
S	Topics of seminar papers and instructions and method of presentation	2
S	Submission and presentation of seminar papers	13
S	Discussions on a given topic	5
E	Mastering professional skills in the teaching base of KBC Split at the Department of Diagnostic and Interventional Radiology and Polyclinic Medikol through the application of knowledge acquired according to the plan and program listed in the Book of Clinical Skills	95

Format of instruction		
	x lectures x seminars and workshops x exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory x work with mentor x practical work (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance		Research		Practical training	4	
Experimental work		Report				
Essay		Seminar essay	1	(Other)		
Tests		Oral exam	1	(Other)		
Written exam		Project		(Other)		

Grading and evaluating student	Verification indicators	Success (points)	Part of grade (%)

work in class and at the final exam	Seminar assignment (presentation…)	25	25
	Oral exam	12,5	12,5
	Practical work	62,6	62,6
	Total	**100**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	User guides for each device		

Optional literature (at the time of submission of study programme proposal)	
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Bachelor's Thesis					
Code	**ZSR634**	Year of study	3.			
Course teacher	Mentor	Credits (ECTS)	14			
Associate teachers		Type of instruction (number of hours)	L	S	E	T
					320	
Status of the course	Mandatory	Percentage of application of e-learning				

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	Completed lectures and passed all exams
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Students will: - Prepare Bachelor's thesis (graduate thesis) with the assistance and under supervision of the mentor - Present the paper before the committee

Course content broken down in detail by weekly class schedule (syllabus)	Form of teaching	Topics	Hours
	E	With the assistance of the mentor and the knowledge acquired during the course, after choosing the topic students will prepare the Final Paper using all available sources and databases.	320

Format of instruction		
	☐ lectures ☐ seminars and workshops ☐ exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory X work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance		Research		Practical training	
	Experimental work		Report			
	Essay		Seminar essay		(Other)	
	Tests		Oral exam		(Other)	
	Written exam		Project		(Other)	

Grading and evaluating student work in class and at the final exam

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)	**Title**	**Number of copies in the library**	**Availability via other media**
	In consultation with the mentor		
Optional literature (at the time of submission of study programme proposal)	In consultation with the mentor		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	Multiplanar Imaging of Body Structures					
Code	**ZSR625**	Year of study	3.			
Course teacher	Assistant professor Sanja Lovrić Kojundžić	Credits (ECTS)	2			
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	L	S	E	T
			15	10	10	
Status of the course	Elective	Percentage of application of e-learning	10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	Upon completion of the course the student will be able to: • Describe different methods of radiological presentation of anatomical structures of the body • Describe the different radiological methods used in multiplanar presentation of the body structure in CT on MR • Know the methods of post-processing of radiological images in the analysis of various anatomical structures and pathological changes of the body • Know the methods of post-processing of radiological images used to analyze variations in development, constitution, age, and sex • Easier processing of radiological images by using computer programs

Course content broken down in detail by weekly class schedule (syllabus)

Teaching form	Theme	No of student hours
P1	Radiological methods of MPR of head and neck structures	4
S1	Reconstruction algorithms	3
V1	MPR representation of anatomical structures	2
V2	Computer reconstruction	2
P2	Radiological methods of MPR of the thorax and abdomen	4
S2	MIP, MPR and VRT	2
V3	CT post-processing techniques	2
V4	MR post-processing techniques	2
P3	Angiography of CT and MR in MPP	4
S3	Virtual endoscopy	2
P4	Multiplanar presentation in MR	3
S4	Image quality	3
V5	3D sequences in MR	2

Format of instruction		
	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☐ (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning	

<table>
<tr><td rowspan="6">Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)</td><td>Class attendance</td><td>0,2</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
<tr><td>Experimental work</td><td></td><td>Report</td><td></td><td></td><td></td></tr>
<tr><td>Essay</td><td></td><td>Seminar essay</td><td>0,8</td><td>(Other)</td><td></td></tr>
<tr><td>Tests</td><td></td><td>Oral exam</td><td>1</td><td>(Other)</td><td></td></tr>
<tr><td>Written exam</td><td></td><td>Project</td><td></td><td>(Other)</td><td></td></tr>
<tr><td></td><td colspan="6"></td></tr>
<tr><td>Grading and evaluating student work in class and at the final exam</td><td colspan="6">
<table>
<tr><th>Verification indicators</th><th>Performance (points)</th><th>Grading (%)</th></tr>
<tr><td>Attendance and activity at lectures and seminars for 100% attendance</td><td>10</td><td>10</td></tr>
<tr><td>Seminar paper (presentation ...)</td><td>40</td><td>40</td></tr>
<tr><td>Oral exam</td><td>50</td><td>50</td></tr>
<tr><td>In total</td><td></td><td>100</td></tr>
</table>
RATIO OF SUCESS AND EVALUATION
<table>
<tr><th>Achieved success percentage (%)</th><th>Criterion</th><th>Evaluation</th></tr>
<tr><td>60-69,9</td><td>meets the minimum criteria</td><td>sufficient (2)</td></tr>
<tr><td>70-79,9</td><td>average success</td><td>good (3)</td></tr>
<tr><td>80-89,9</td><td>above-average success</td><td>very good (4)</td></tr>
<tr><td>90-100</td><td>exceptional success</td><td>excellent (5)</td></tr>
</table>
</td></tr>
<tr><td>Required literature (available in the library and via other media)</td><td colspan="6">
<table>
<tr><th>Title</th><th>Number of copies in the library</th><th>Availability via other media</th></tr>
<tr><td>Hebrang A, Lovrenčić M. Radiologija. Medicinska naklada, Zagreb 2001</td><td></td><td></td></tr>
<tr><td>Mašković J. Multiplanarni prikaz struktura tijela za inženjere medicinske radiologije 2004. (Autorizirana skripta)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
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</td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="6"></td></tr>
<tr><td>Quality assurance methods that ensure the acquisition of exit competences</td><td colspan="6">

Teaching quality analysis by students and teachers
Exam passing rate analysis
Committee for control of teaching reports
External evaluation

</td></tr>
<tr><td>Other (as the proposer wishes to add)</td><td colspan="6"></td></tr>
</table>

<table>
<tr><td>NAME OF THE COURSE</td><td colspan="6">Nuclear Medicine Instrumentation</td></tr>
<tr><td>Code</td><td>ZSR630</td><td colspan="2">Year of study</td><td colspan="3">3.</td></tr>
<tr><td>Course teacher</td><td>Ante Punda, MD
Full Professor</td><td colspan="2">Credits (ECTS)</td><td colspan="3">2</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2"></td><td colspan="2" rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>T</td></tr>
<tr><td>15</td><td>10</td><td>10</td><td></td></tr>
<tr><td>Status of the course</td><td>Elective</td><td colspan="2">Percentage of application of e-learning</td><td colspan="3">Up to 10%</td></tr>
<tr><td colspan="7">COURSE DESCRIPTION</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="6">No requirements</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="6">After completing the course the student will be able to:
- Describe the optimization of planar imaging parameters using a gamma camera,
- Describe the sources of radiation,
- Describe the phantoms and equipment for the implementation of quality control procedures at department of nuclear medicine (NM),
- Describe the quality control procedures for planar imaging,
- Describe the quality control procedures for SPECT imaging,
- Describe the dose calibrator, measurements and quality control procedures,
- Describe the scintillation detector: probe and "well" type detectors,
- Describe the ionizing radiation protection: optimization of protective equipment when working with open sources of ionizing radiation and elements of personal dosimetry,
- Describe workspace supervision,
- Describe an example of designing a quality assurance program for hypothetical NM department.</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="6">- Optimization of planar imaging parameters using a gamma camera,
- Sources of radiation,
- Phantoms and equipment for the implementation of quality control procedures at department of nuclear medicine (NM),
- Quality control procedures for planar imaging,
- Quality control procedures for SPECT imaging,
- Dose calibrator, measurements and quality control procedures,
- Scintillation detector: probe and "well" type detectors,
- Ionizing radiation protection: optimization of protective equipment when working with open sources of ionizing radiation and elements of personal dosimetry,
- Workspace supervision,
- Example of designing a quality assurance program for hypothetical NM department.</td></tr>
<tr><td>Format of instruction</td><td colspan="3">X lectures
X seminars and workshops
X exercises
☐ on line in entirety
☐ partial e-learning
☐ field work</td><td colspan="3">☐ independent assignments
☐ multimedia
☐ laboratory
☐ work with mentor</td></tr>
<tr><td>Student responsibilities</td><td colspan="6">Regular class attendance
Active participation in the teaching process
Password for AAI EduHr electronic identity to access e-learning</td></tr>
<tr><td>Screening student work (name the</td><td>Class attendance</td><td>0,20</td><td>Research</td><td></td><td>Practical training</td><td></td></tr>
</table>

proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)	Experimental work	0,80	Report			
	Essay		Seminar essay		(Other)	
	Colloquium		Oral exam		(Other)	
	Written exam	1	Project		(Other)	
Grading and evaluating student work in class and at the final exam	Written exam					

	Title	Number of copies in the library	Availability via other media
Required literature (available in the library and via other media)	Ivančević D (ur.) Klinička nuklerna medicina, Medicinska naklada, Zagreb 1999. Janković S. i sur. "Radiološki uređaji i oprema u Radiologiji, Radioterapiji i Nuklearnoj medicini" , Sveučilište u Splitu, SOZS,2015.		
	Teaching materials and ppt presentations posted on the Merlin platform		
Optional literature (at the time of submission of study programme proposal)			
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

NAME OF THE COURSE	**Planning in Radiotherapy**							
Code	**ZSR631**							
Studu programme	Radiologic Techology	Year of study	3.					
Course teacher	Assist. prof. Tihana Boraska Jelavić, MD	Credits (ECTS)	2					
Associate teachers	Associates from teaching bases	Type of instruction (number of hours)	P	S	KL	PKL	IR	
			15	10	10			
Status of the course	Elective	Percentage of application of e-learning	do 10%					

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: 1. Describe the physical basis of planning in radiotherapy, 2. Describe simulation for radiotherapy, 3. Describe CT planning, 4. Describe 2D and 3D techniques, 5. Describe computers in radiotherapy, 6. Describe the radiotherapy treatment.

Course content broken down in detail by weekly class schedule (syllabus)

Oblik nastave	Tema	Broj student sati
P1	Physical aspects of radiotherapy planning	3
P2	Tumor volume, target volume, irradiated volume and organs-at-risk	2
P3	Computer isodose plan	3
P4	Precision and reproducibility of radiotherapy plan	2
P5	3D CRT and IMRT radiotherapy plan	3
P6	CT, PET-CT and MRI in radiotherapy treatment planning	2
S1	Planning in patients with head and neck tumors	2
S2	Planning in patients with breast tumors	2
S3	Planning in patients with lung tumors	2
S4	Planning in patients with pelvic tumors	2
S5	Planning in patients with digestive tract tumors	2
V1	Planning and conductance of radiotherapy with simple techniques	5
V2	Planning and conductance of radiotherapy with advanced techniques	5

Format of instruction	X lectures X seminars and workshops ☐ exercises ☐ *on line* in entirety ☒ partial e/learning ☐ field work	☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor ☒ clinical work

Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*

Class attendance	0.1	Research		Practical training	
Experimental work	0.2	Report			
Essay		Seminar essay	0.5	(Other)	
Tests		Oral exam	0.2	(Other)	
Written exam	0.5	Project		(Other)	

Grading and evaluating student work in class and at the final exam

Verfication indicators	Success *points(	Part of grade *%(
Class attendance	5	5
Experimental work	10	10
Written exam	50	50
Seminar essay	10	10
Oral exam	25	25
TOTAL	**100**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

Required literature (available in the library and via other media)

Title	Number of copies in the library	Availability via other media
1. Šamija, Krajina, Purišić: RADIOTERAPIJA, Globus Zagreb 1996	/	Available at course leader on demand
2. ppt presentations in PDF	/	On a web site MSTeams /Course Radiotherapy and Oncology
3.Vrdoljak E, Belac Lovasić I, Kusić Z, Gugić D, Juretić A. Klinička onkologija. Medicinska naklada, Zagreb, 2018. (odabrana poglavlja)	/	Available at course leader on demand

Optional literature (at the time of submission of study programme proposal)	2.S. Janković, D. Eterović: Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada Zagreb, 2002.
Quality assurance methods that ensure	It is necessery to attend: - lectures - minimally 80% of all lectures, - seminars 90% and practices 100%,

the acquisition of exit competences	- active course participation
Other (as the proposer wishes to add)	

NAME OF THE COURSE	Radiotherapy Devices						
Code	**DSR632**		Year of study	3.			
Course teacher	Tihana Boraska Jelavić, PhD, Assistant professor		Credits (ECTS)	2			
Associate teachers	Associates from teaching bases		Type of instruction (number of hours)	L	S	E	T
				15	10	10	
Status of the course	Elective		Percentage of application of e-learning	Up to 10%			

COURSE DESCRIPTION

Course enrolment requirements and entry competences required for the course	No requirements
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	After completing the course the student will be able to: - Describe the basic components of radiotherapy equipment and their function, - Describe teletherapy units, - Describe brachytherapy units, - Describe computers in radiotherapy, - Describe operation of a linear accelerator, - Describe management of simulator, - Describe CT simulator.
Course content broken down in detail by weekly class schedule (syllabus)	- Basic components of radiotherapy equipment and their function, - Teletherapy units, - Brachytherapy units, - Computers in radiotherapy, - Operation of a linear accelerator, - Management of simulator, - CT simulator.
Format of instruction	X lectures X seminars and workshops X exercises ☐ *on line* in entirety ☐ partial e-learning ☐ field work ☐ independent assignments ☐ multimedia ☐ laboratory ☐ work with mentor X clinical practice (other)
Student responsibilities	Regular class attendance Active participation in the teaching process Password for AAI EduHr electronic identity to access e-learning

Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)*						
	Class attendance	0.1	Research		Practical training	
	Experimental work	0.2	Report			
	Essay		Seminar essay	0.5	(Other)	
	Tests		Oral exam	0.2	(Other)	
	Written exam	1	Project		(Other)	

Grading and evaluating student work in class and at the final exam	Verification indicators	Success (points)	Part of grade (%)
	Class attendance	5	5
	Experimental work	10	10
	Written exam	50	50

	Seminar essay	25	25
	Oral exam	10	10
	Total	**100**	**100**

RATIO OF SUCCESS AND EVALUATION

SUCCESS RATE ACHIEVED (%)		EVALUATION
FROM	TO	
60%	69,9%	sufficient (2)
70%	79,9%	good (3)
80%	89,9%	very good (4)
90%	100%	excellent (5)

	Title	**Number of copies in the library**	**Availability via other media**
Required literature (available in the library and via other media)	PDF/ppt lectures on Merlin		
	Vrdoljak E, Belac Lovasić I, Kusić Z, Gugić D, Juretić A. Klinička onkologija. Medicinska naklada, Zagreb, 2018. (odabrana poglavlja)		
	Šamija, Krajina, Purišić: RADIOTERAPIJA, Globus Zagreb 1996		
Optional literature (at the time of submission of study programme proposal)	S. Janković, D. Eterović: Fizikalne osnove i klinički aspekti medicinske dijagnostike, Medicinska naklada Zagreb, 2002.		
Quality assurance methods that ensure the acquisition of exit competences	▪ Teaching quality analysis by students and teachers ▪ Exam passing rate analysis ▪ Committee for control of teaching reports ▪ External evaluation		
Other (as the proposer wishes to add)			

LIST OF COURSES, TEACHERS AND ASSOCIATES

CODE	COURSE	COURSE TEACHERS
ZSZ634	Informatics and Statistics in Health Care	Antonela Matana, PhD, Assistant Professor
ZSZ635	Social and Health Legislation	Jozo Čizmić, full professor tenure Nina Mišić Radanović, assistant professor
ZSZ604	Basics of Health Care Management	Dejan Kružić, PhD, Full professor tenure
ZSZ605	Ethics in Health Care	Ana Ćurković, PhD, Assistant professor Ana Jeličić, PhD, Assistant professor
ZSZ606	Physical Training I	Željko Kovačević, PhD Assistant Professor
ZSZ636	English for Radiologic Technology I	Sonja Koren, MA, Senior lecturer
ZSZ608	Health Care Psychology	Vesna Antičević, PhD, Associate professor
ZSZ609	Communication Skills	Vesna Antičević, PhD, Associate professor
ZSZ610	Hygiene and Epidemiology	Assoc. Prof. Anamarija Jurcev Savicevic, MD, PhD
ZSZ611	Sociology of Health	Ana Ćurković, PhD, Assistant professor Ana Jeličić, PhD, Assistant professor
ZSZ613	Public Health	Assoc. Prof. Anamarija Jurcev Savicevic, MD, PhD Full Professor Rosanda Mulic, MD, PhD Asst. Prof. Iris Jerončić Tomić, MD, PhD Asst. Prof. Ana Ćurković, MD Asst. Prof. Željka Karin,MD, PhD Asst. Prof. Ivana Marasović-Šušnjara, MD, PhD
ZSZ614	Biochemistry	Full Prof. Irena Drmić Hofman, PhD
ZSZ615	Biophysics	Prof. Ivica Aviani, PhD Prof. Ante Bilušić, PhD Mr. Darijo Radović, dr. med., senior lecturer
ZSZ616	Anatomy	Prof. Ivica Grković, MD PhD Prof. Ana Marušić, MD PhD Prof. Katarina Vilović, MD PhD Prof. Katarina Vukojević, MD PhD Associates from teaching bases
ZSZ617	Physiology	Assoc. Ante Obad, PhD, MD Prof. Maja Valić, PhD, MD Prof. Zoran Valić, PhD, MD
ZSZ618	Biology	Sendi Kuret, PhD, Assistant Professor
ZSZ620	Basics of Nursing Care	Prof. Julije Meštrović, MD, PhD Diana Aranza, master of Nursing
ZSR601	Radiation Physics and Electronics	Mile Dželalija, PhD, Full professor
ZSR602	Introduction to Radiology	Stipan Janković, MD, PhD, Full professor with tenure Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases
ZSR603	Radiological Propedeutics	Igor Borić, MD Assistant Professor
ZSR604	Radiobiology and Radiation Protection	Stipan Janković, MD, PhD, Full professor with tenure Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases
ZSR605	Clinical Practice I	Frane Mihanović, PhD, asistant. prof.

		Tatjana Matijaš, master of radiological technology, lecturer., Associates from teaching bases
ZSR607	Radiological Image Receptors	Associate Professor Krešimir Dolić, MD, PhD Tatjana Matijaš, master of radiological technology, lecturer Other associates in the field of radiological technology
ZSZ621	Introduction to Scientific Work	Davorka Sutlović, PhD, Full professor with tenur Vjekoslav Krželj, PhD, Full professor with tenor Frane Mihanović, PhD, Assistant professor Sendi Kuret, PhD, Assistant professor Ante Burger, PhD, Assistant professor Diana Aranza, lecturer Mario Marendić, lecturer Mario Podrug, assistant
ZSZ622	Use of Scientific Technology	Antonela Matana, PhD Assistant Professor
ZSZ623	Physical Training II	Željko Kovačević, PhD, Assistant Professor
ZSZ637	English for Radiologic Technology II	Sonja Koren, MA, Senior lecturer
ZSZ625	Pathophysiology	Assist. Prof. Anteo Bradarić-Šlujo, MD, PhD Associates from teaching bases
ZSZ626	Pathology	Prof.dr.sc. Valdi Pešutić-Pisac Prof.dr.sc. Šimun Anđelinović MDPhD ;
ZSZ627	Microbiology with Parasitology	asst. prof. *Vanja Kaliterna*, M.D., PhD, clinical microbiology specialist asst. prof. *Anita Novak*, M.D., PhD, clinical microbiology specialist asst. prof. *Katarina Šiško Kraljević*, M.D., PhD, clinical microbiology specialist asst. prof. *Merica Carev*, M.D., PhD, clinical microbiology specialist *Associates from teaching bases*
ZSZ628	Pharmacology	Mladen Boban, MD, Full Professor Ivana Mudnić, Associate Professor Associates from teaching bases
ZSR606	Radiological Devices and Equipment	Stipan Janković, MD, PhD, Full professor with tenure Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases
ZSR608	Radiological Vocabulary and Standards	Assistant professor Sanja Lovrić Kojundžić
ZSR609	Skeletal Radiography	Maja Marinović Guić, MD, PhD, Assistant Professor
ZSR610	Conventional Radiological Methods	Stipan Janković, MD, PhD, Full professor with tenure Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases
ZSR612	Theories of Imaging	Associate Professor Krešimir Dolić, MD, PhD Mr. Sc. Darijo Radović, MD, senior lecturer Matijas Tatjana, master of radiological technology, lecturer Associates from teaching bases
ZSR613	Radiological Anatomy and Pathology	Igor Borić, MD, Assistant Professor Maja Marinović Guić, MD Assistant Professor
ZSR614	Internal Medicine	Višnja Kokić Maleš, MD, Assistant Professor
ZSR616	Surgery and Traumatology	Zenon Pogorelić, MD, Associate Professor
ZSR617	Contrast Media	Danijela Budimir Mršić, MD, PhD, lecturer Associates from teaching bases
ZSR618	Computers in Radiology	Frane Mihanović, PhD, asistant. prof. Associates from teaching bases

ZSR619	Clinical Practice II	Frane Mihanović, PhD, asistant. prof. Tatjana Matijaš, master of radiological technology, lecturer., Associates from teaching bases
ZSR611	Radiological Methods in Special Working Fields	Assistant professor Sanja Lovrić Kojundžić Associates from teaching bases
ZSR635	Application of Radiography in Other Fields	Frane Mihanović, PhD, assistant prof.
ZSZ630	Emergencies in Medicine	Mihajlo Lojpur, M.D., Ph.D, Assistant Professor Associates from teaching bases
ZSR621	Ultrasound Diagnostics	Igor Barišić, PhD, Assistant professor Associates from teaching bases
ZSR621	Computerised Tomography	Ivana Štula PhD, Assistant professor
ZSR622	DSA	Tonći Batinić, PhD, Assistant professor Associates from teaching basese
ZSR623	MRI	Associate Professor Krešimir Dolić, MD, PhD Assistant Professor Frane Mihanović, MD, PhD Associates from teaching bases
ZSR624	New Technologies in Radiology	Frane Mihanović, PhD, assistant prof. Associates from teaching bases
ZSR626	Interventional Radiology	Tonći Batinić, PhD, Assistant professor Associates from teaching basese
ZSR627	Nuclear Medicine	Ante Punda, MD, Full Professor
ZSR628	Radiotherapy and Oncology	Assist. prof. Tihana Boraska Jelavić, MD
ZSR629	Equipment and Workflow Quality Control	Ivana Štula PhD, Assistant professor Associates from teaching basese
ZSR633	Clinical Practice III	Frane Mihanović, PhD, asistant. prof. Tatjana Matijaš, master of radiological technology, lecturer., Associates from teaching bases
ZSR634	Bachelor's Thesis	
ZSR625	Multiplanar Reconstruction Images of Body Structures	Assistant professor Sanja Lovrić Kojundžić Associates from teaching bases
ZSR630	Nuclear Medicine Instrumentation	Ante Punda, MD, Full Professor
ZSR631	Radiotherapy Planning	- Assist. prof. Tihana Boraska Jelavić, MD
ZSR632	Radiotherapy Devices	- Assist. prof. Tihana Boraska Jelavić, MD – Associates from teaching bases

CURRICULUM VITAE OF TEACHERS AND ASSOCIATES

In alphabetical order:

Title, name and last name	**Associate professor Vesna Antičević, PhD**
Title of the course at the proposed study programme	Health Care Psychology Communication Skills
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	vesna.anticevic@ozs.unist.hr
Year of birth	1965
Scientist ID	336020
CROSBI profile ID	31537
Research rank and date of the last appointment	Associate professor 2020
Research and teaching or teaching rank, and the date of the last appointment	Associate professor
Area and field of appointment into research rank	Social sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies
Date of employment	2014
Job title (professor, researcher, associate teacher, etc.)	professor
Field of research	Social sciences
Position in the institution	Head of the quality
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Zagreb, University Department of Health Studies
Place	Zagreb
Date	2012
INFORMATION ON ADDITIONAL TRAINING	
Year	2004
Place	Zagreb
Institution	University of Zagreb, University Department of Health Studies
Field of training	Postgraduate professional study
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Germany 2
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Undergaraduate studies: Health psychology Communication skills Psychology of Pain Biological basis of behavior Psychology of disability

	Psychology of lifelong learning Graduate studies: Communication and clinical assessment Clinical care for psychiatric patients English studies: Educational psychology Healthcare for persons with disabilities Healthcare of psychiatric patients
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Dolić, Matea; Antičević, Vesna; Dolić, Krešimir; Pogorelić, Zenon Difference in pandemic-related experiences and factors associated with sickness absence among nurses working in COVID-19 and non-COVID-19 departments (2022). International journal of environmental research and public health, 19, 3; 1093, 20 doi:10.3390/ijerph19031093 2. Dolić, Matea; Antičević, Vesna; Dolić, Krešimir; Pogorelić, Zenon. Questionnaire for assessing social contacts of nurses who worked with coronavirus patients during the first wave of the COVID-19 pandemic // Healthcare, 9 (2021), 8; 930, 9 doi:10.3390/healthcare9080930 3. Đapić Kolak, Zdravka; Antičević, Vesna The effect of continuous training of nurses and carers on the protection of the health of users of the Nursing Home // Medica Jadertina, 48 (2018), 4; 207-216 4. ković, Stipan; Koren, Sanja; Šarić, Matea; Orlandini, Rahela; Antičević, Vesna; Švaljug, Deana; Buljubašić, Ante The Croatian Model of University Education for Nurses // International Archives of Nursing and Health Care, 4 (2018), 2; 1-4 doi:10.23937/2469-5823/1510093 5. Klarin, Mira; Antičević, Vesna; Kardum, Goran; Proroković, Ana; Sindik, Joško Communication and social skills in education of health occupation students: attitudes and validation on nationwide parallel group randomized study // Suvremena psihologija, 20 (2017), 1; 39-52
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Diana Aranza, Master of Nursing, lecturer**
Title of the course at the proposed study programme	Basics of Nursing Care
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	daranza@ozs.unist.hr
Year of birth	1972.
Scientist ID	
CROSBI profile ID	38136
Research rank and date of the last appointment	
Research and teaching or teaching rank, and the date of the last appointment	Lecturer, 08.9.2017.
Area and field of appointment into research rank	Biomedicine and Health; Clinical Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split; University Department of Health Studies
Date of employment	8th September 2017.
Job title (professor, researcher, associate teacher, etc.)	Lecturer
Field of research	Nursing and midwifery
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Master of Nursing
Institution	University of Split; University Department of Health Studies
Place	Split, Croatia
Date	9th July 2014.
INFORMATION ON ADDITIONAL TRAINING	
Year	2017 – 2021.
Place	Split
Institution	University of Split; University Department of Health Studies
Field of training	- Expert Mentor. Completed training program for expert mentors, organized by the Ministry of Health of the Republic of Croatia within the European Union-funded Twinning project "Training of mentors for nurses and midwives in the health care system of the Republic of Croatia and implementation of the training curriculum in accordance with Directive 2005/36 / EC". - KBC Split - Clinic for Paediatrics; Croatian Paediatric Society; Croatian Society for School and University Medicine; HUMS - Paediatric Society; University of Split – SOZS - Cochrane Croatia_Systematic Reviews_Presentation 3 poster presentations (2018, 2019, 2020) - Communication skills in working with students; basic small group leadership and teamwork skills; curriculum planning, implementation, and assessment; and the mentoring process. - Nursing care of patients with stoma - How to take care of yourself in COVID -19 pandemic
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (3)

COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Professional subjects in the field of nursing and health care
Authorship of university textbooks from the field of the course	Midwifery care in the postpartum period and its complications – Co-authorship on a peer-reviewed university script Introduction to Midwifery – Script Midwifery care in gynecology – Script Maternal and newborn health care – Script
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	Supičić Z, Puljić Z, Milić M, Aranza D. Health literacy of students at the University of Split: a cross-sectional study. Journal of Applied Health Sciences [Internet of Applied Health Sciences]. 2021; 7 (1): 25-35. https://doi.org/10.24141/1/7/1/3 Podrug M, Aranza D, Bazina AM, Krželj L, Milić M. Epidemiological characteristics of patients with arterial hypertension who sought emergency medical care in the Split-dalmatia county. Research in Physical Education, Sport and Health 2017; 6 (2): 53-57. Puljić Z, Supičić Z, Milić M, Aranza D. Attitudes of University of Split students about psychiatric patients. Medica Jadertina [Internet]. 2021 [accessed 07.10.2021]; 51 (3): 201-209. Available at: https://hrcak.srce.hr/263139 (SCOPUS) Podrug M, Aranza D, Marendić M, Buljubašić A, Orlandini R, Dolić M, Krželj V. Incidence of injuries of children treated at the Institute of Emergency Medicine of the Split-Dalmatia County. Paediatria Croatica. 2021 Mar 17; 65 (1): 21-6 (SCOPUS) Puljić Z, Supičić Z, Milić M, Aranza D. Knowledge of students of the University of Split about psychiatric diseases: a cross-sectional study. Croatian Journal of Health Sciences [Internet]. 2021; 1 (1): 19-24. Available at: https://hrcak.srce.hr/257816
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	Aranza D, Milavić B, Marusic A, Buzov M, Poklepović Peričić T. A cross-sectional study on adaptation and initial validation of a test to evaluate health claims among high school students: Croatian version. BMJ Open. 2021 Aug 10;11(8):e048754. doi: 10.1136/bmjopen-2021-048754. Puljak L, Čivljak M, Haramina A, Mališa S, Čavić D, Klinec D, Aranza D, Mesarić J, Skitarelić N, Zoranić S, Majstorović D, Neuberg M, Mikšić Š, Ivanišević K. Attitudes and concerns of undergraduate university health sciences students in Croatia regarding complete switch to e-learning during COVID-19 pandemic: a survey. BMC Med Educ. 2020 Nov 10;20(1):416. doi: 10.1186/s12909-020-02343-7. PMID: 33167960; PMCID: PMC7652670. Books Translation and adaptation: Aranza D, Poklepović Peričić T: Informed Health Choices Group. A book of good health decisions: How to think about treatment properly? A textbook on health for children in primary school. Available at:

	https://www.informedhealthchoices.org/wp-content/uploads/2021/02/01_ChildrensBook_HR_CROATIA_web.pdf
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	**Coordinator:** 1. Institutional project of the University Department of Health Studies "Promoting health literacy in children and youth". PromoLit (SOZS-IP-2020-2). **Project participant**: 1. Project of the Croatian Science Foundation (HRZZ IP-2014-09-7672) "Professionalism in health care" "Class: 003-08 / 11-03 / 0005, Reg. No .: 2181-198-03 -04 / 10-11 And Class: 003-08 / 13-03 / 0003, Reg. No .: 2181-198-03-04-13-0038). Project manager prof. dr. sc. Ana Marušić. 2. Erasmus + Project "Evidence Implementation in Clinical Practice" EICP (2020-I-DE0I-KA203-005669). Project manager doc. dr. sc. Tina Poklepović Peričić.
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Passed courses at the Graduate Study of Nursing: Pedagogy, Methodology and Didactics, Health Psychology, Communication Skills Completed training program "Training of mentor educators" organized by the Ministry of Health of the Republic of Croatia within the Twinning project "Training of mentors for nurses and midwives in the health system in the Republic of Croatia and the implementation of educational curriculum in line with Directive 2005/36 / EC" (2018) . Acquisition of knowledge on the application of projects in personal and professional development, teaching and scientific research; possibilities of applying other models of innovative learning and teaching in health education. Completed the continuing education course "Communication and Pedagogical Skills for Clinical Mentors" organised by the "Alumni" Association of Students of the University Department of Health Studies, University of Split (2020). Acquired knowledge of communication skills in working with students; basic skills of leading a small group and working in a team; planning, implementing and evaluating curricula and the mentoring process.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Acknowledgment of the University Department of Health Studies for personal contribution to the publication of textbooks for children "Book of good health decisions: how to think about treatment", textbook on health for children in primary school and overall contribution to the work of the University Department of Health Studies

Title, name and last name	**Ivica Aviani, PhD, Professor**
Title of the course at the proposed study programme	Biophysics
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	iaviani@pmfst.hr
Personal web page	https://mapmf.pmfst.unist.hr/~iaviani/
Year of birth	1955
Scientist ID	76256
CROSBI profile ID	20158
Research rank and date of the last appointment	Senior Scientist, 23/05/2018
Research and teaching or teaching rank, and the date of the last appointment	Full Professor, 06/02/2019
Area and field of appointment into research rank	Area of natural sciences – field of physics
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Faculty of Science in Split
Date of employment	05. 07. 2012.
Job title (professor, researcher, associate teacher, etc.)	Professor
Field of research	Solid State Physics, Biophysics, Physics Education
Position in the institution	Head of graduate studies in mathematics and physics; teaching major. Head of graduate studies in physics; teaching major. Head of the Laboratory for Structural Characterization of Samples. Head of the Physics Teaching Methods Laboratory.
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Zagreb, Faculty of Science
Place	Zagreb
Date	20/07/1999
INFORMATION ON ADDITIONAL TRAINING	
Year	**2011**
Place	Vienna, Austria
Institution	Institute of Physical Chemistry
Area of training	Transport and Magnetic Properties of Thermoelectrics
Year	**2009.**
Place	Vienna, Austria
Institution	Institute of Physical Chemistry
Area of training	Transport Properties of Thermoelectrics
Year	**2007.**
Place	Cambridge, England
Institution	University of Cambridge, Cavendish Laboratory
Area of training	Transport Properties of Pressurised CeGe
Year	**2003.**
Place	Grenoble, France
Institution	University of Joseph Fourier
Area of training	Magnetostriction of Rare Earth Hexaboride
Year	**2001.**
Place	Grenoble, France
Institution	C.N.R.S. - Lab. Magnetisme Louis Néel
Area of training	Magnetostriction of Rare Earth Hexaboride
Year	**1999. - 2000.**
Place	Grenoble, France

Institution	C.N.R.S. - Lab. Magnetisme Louis Néel
Area of training	Producing a magnetostriction device
Year	**1996.**
Place	Frankfurt am M., Germany
Institution	University of J.W. Goethe, Physikalishes Institut
Area of training	Ultrasound Characterization of Electric Properties of Heavy Fermions
MOTHER TONGUE AND FOREIGN LANGUAGES	
Native language	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5 (excellent)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	French 2 (sufficient)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	• *Physics Education I, II i III*, Graduate programme Master of Education in Physics at University of Split, Faculty of Science, Department of Physics, 2015 – present. • *Introduction to statistical physics (Statistical physics I)*, Undergraduate programme Batchelor in physics at University of Split, Faculty of Science, 2017– present. • *Experimental Methods of Physics in Biophysics*, Ph.D. study of Biophysics at the Faculty of Science, University of Split, 2019 – present (a part of course). • *Research-based physics education strategies,* Postgraduate University Study Programme in "Education Research in Natural and Technical Sciences", University of Split, Faculty of Science 2020 – present. • *Selected Chapters in Methods of Teaching Physics, Postgraduate programme "Physics in Education" at University of Sarajevo, (2014 – present).* • *Fundamental Concepts in Physics, Undergraduate programme Batchelor in physics at University of Split, Faculty of Science, Department of Physics (2013 – 2015).* • *Physics 1, Graduate program in Conservation and Restoration at the Arts Academy, University of Split, 2011 – 2013.*
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	• J. Car, D. Blažeka, T. Bajan, L. Krce, I. Aviani, N. Krstulović, *A quantitative analysis of colloidal solution of metal nanoparticles produced by laser ablation in liquids*, Applied Physics A, 127, 838 (2021), https://doi.org/10.1007/s00339-021-04966-z • D. Crnčević, L. Krce, L. Mastelić, A. Maravić, B. Soldo, I. Aviani, I. Primožič, R. Odžak, M. Šprung,*The mode of antibacterial action of quaternary N-benzylimidazole salts against emerging opportunistic pathogens,* Bioorganic Chemistry, **112**, 104938 (2021), https://doi.org/10.1016/j.bioorg.2021.104938 • L. Krce, M. Šprung, T. Rončević, A. Maravić, V. Čikeš Čulić, D. Blažeka, N. Krstulović and I. Aviani, *Probing the Mode of Antibacterial Action of Silver Nanoparticles Synthesized by Laser Ablation in Water: What Fluorescence and AFM Data Tell Us,* Nanomaterials **10 (6)**, 1040 (2020), https://doi.org/10.3390/nano10061040

	• L. Krce, M. Šprung, A. Maravić, P. Umek, K. Salamon, N. Krstulović and I. Aviani, *Bacteria Exposed to Silver Nanoparticles Synthesized by Laser Ablation in Water: Modelling E. coli Growth and Inactivation,* Materials **13 (3)**, 653 (2020), https://doi.org/10.3390/ma13030653 • L. Krce, M. Šprung, A. Maravić, I. Aviani, *A simple interaction-based E. coli growth model,* Physical Biology **16 (6)**, 066005 (2019), https://doi.org/10.1088/1478-3975/ab3d51
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	• N. Erceg, L. Jelovica, Z. Hrepić, V. Mešić, M. Karuza, I. Aviani, *University students' conceptual understanding of microscopic models of electrical and thermal conduction in solids,* Eur. J. Phys. **42**, 045702 (2021), https://doi.org/10.1088/1361-6404/abf5eb • D.S. Glamočić, V. Mešić, K. Neumann, A. Sušac, W.J. Boone, I. Aviani, E. Hasović, N. Erceg, R. Repnik, V. Grubelnik *Maintaining item banks with the Rasch model: An example from wave optics,* Phys. Rev. Phys. Educ. Res. **17**, 010115 (2021), https://doi.org/10.1103/PhysRevPhysEducRes.17.010105 • N. Erceg, I. Aviani, M. Karuza, K. Grlaš, V. Mešić, *Development of the kinetic molecular theory of liquids concept inventory: Preliminary results on university students' misconceptions*, Eur. J. Phys. 40, 025704 (2019). https://doi.org/10.1088/1361-6404/aaff36 • V Mešić, K. Neumann, I. Aviani, E. Hasović, W. J. Boone, N. Erceg, V. Grubelnik, A. Sušac, Dž. Salibašić Glamočić, M. Karuza, A. Vidak, A. Alihodžić and R. Repnik, *Measuring students' conceptual understanding of wave optics: A Rasch modeling approach*, Phys Rev. Phys. Educ. Res. 15, 010115 (2019). https://doi.org/10.1103/PhysRevPhysEducRes.15.010115 • N. Erceg, I. Aviani, V. Mešić, M. Glunčić, G. Žauhar, *Development of the kinetic molecular theory of gases concept inventory: Preliminary results on university students' misconceptions*, Phys. Rev. Phys. Educ. Res. 12, 020139 (2016). https://doi.org/10.1103/PhysRevPhysEducRes.12.020139
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	• 2020. – 2024. *Laser synthesis of nanoparticles,* HrZZ Project: IP-2019-04-6418, principal investigator Nikša Krstulović. • 2020. – 2023. *Engineering reservoirs and optimizing response function measurements in quantum simulators and computers,* Croatian-American NSF project, No: 2/2019, principal investigator Ivica Aviani. • 2020. – 2022. *Research on students' conceptual understanding of microscopic models in thermodynamics and development of modern methodical tools*, University of Rijeka project, principal investigator Nataša Erceg. • 2019 – 2022 *Development of Physics Studies with the Application of The Croatian Qualifications Framework (CROQF)*, The European Social Fund (ESF) project. • 2018 - 2021 I*nternationalization of Graduate Study Programs at The Faculty of Science in Split*, ESF project.
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Through teacher training programs before the Education and Teacher Training Agency, at district and state professional conventions for physics teachers (over 60 conventions).
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Award from the University of Split, Faculty of Science, for outstanding scientific research in 2019.

Title, name and last name of the course leader	**Assistant Professor Tonći Batinić, MD, PhD**
Title of the course at the proposed study programme	DSA, Interventional Radiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	tonci.batinic23@gmail.com
Personal web page	
Year of birth	1963
Scientist ID	345323
CROSBI profile ID	32444
Research rank and date of the last appointment	
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor at the Department of Medical Radiology, 2014
Area and field of appointment into research rank	Basic and clinical medical sciences - field of clinical medicine
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Hospital Split
Date of employment	1998
Job title (professor, researcher, associate teacher, etc.)	Assistant Professor
Field of research	interventional radiology, cardiovascular field
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Assistant Professor
Institution	University Hospital Split
Place	Split
Date	2014
INFORMATION ON ADDITIONAL TRAINING	
Year	2014
Place	Berlin
Institution	CMR-Academy, Deutsches Herzzentrum Berlin
Field of training	Cardiac MR
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	• 2006 - 2014 - Assistant at the Department of Radiology • 2012- teaching associate in the following courses: ultrasound, CT, MRI at the Department of Health Studies (OZS) Split • 2012- teaching associate of the Department of Dental Medicine • 2014 - Head of the DSA and Interventional Radiology course at the Department of Health Studies (OZS) Split
Authorship of university textbooks from the field of the course	1. Janković S: Seminari iz kliničke radiologije, Medicinski fakultet Sveučilišta u Splitu, Split, 2005.

	2. Mašković J, Janković S: Odabrana poglavlja intervencijske radiologije, Medicinski fakultet Sveučilišta u Splitu, Split, 2008. 3. Mirić D i sur.: Koronarna bolest, Hrvatsko Kardiološko Društvo-ogranak Split, Split, 2009.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	• Vuković I, Brešković T, Duplančić D, **Batinić T**, Štula I, Bulat C, Tomić S. Castleman's disease presenting as a tumorous paracardiac formation. Acta clinica Croatica 55(1):161-166 · March 2016 • Stembridge M, Hoiland RL, Bain AR, Barak OF, Drvis I, MacLeod DB, MacLeod DM, Madden D, **Batinic T**, O'Donoghue P, Shave R, Dujic Z, Ainslie PN. Influence of lung volume on the interaction between cardiac output and cerebrovascular regulation during extreme apnoea. Exp.Physiol. 2017 Oct 1;102(10):1288-1299. doi: 10.1113/EP086429. • Penović S, Cambj-Sapunar L, **Batinić T,** Borić T, Ribičić I, Kanjer A, Opačak R, Šimić F, Meštanek D. Endovascular Repair of Symptomatic (Non-ruptured) Abdominal Aortic Aneurysm in the University Hospital Centre Split. Journal of Pharmacy and Pharmacology 6(5) May 2018. DOI: 10.17265/2328-2150/2018.05.010
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	• Associate on a scientific research project: "Investigating Pathological Processes in Ischemic Human Myocardium; Basic Science Tools for Major Health Problem ", project number: 3718, leader: Prof. dr. sc. Darija Baković Kramarić
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Full professor Mladen Boban, MD, PhD**
The course he/she teaches in the proposed study programme	Pharmacology
GENERAL INFORMATION ON COURSE TEACHER	
E-mail address	mladen.boban@mefst.hr
Year of birth	1964
Scientist ID	207836
CROSBI profile ID	15610
Research or art rank, and date of last rank appointment	Scientific adviser, 2005.
Research-and-teaching, art-and-teaching or teaching rank, and date of last rank appointment	Full professor tenure, July 15th, 2010.
Area and field of election into research or art rank	Biomedicine and health, basic medical sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution where employed	University of Split School of Medicine
Date of employment	1997.
Name of position (professor, researcher, associate teacher, etc.)	Professor
Field of research	Pharmacology
Function	Head of the Department of Basic and Clinical Pharmacology
INFORMATION ON EDUCATION – Highest degree earned	
Degree	Ph.D.
Institution	University of Zagreb, School of Medicine
Place	Zagreb
Date	April 21st, 1995.
INFORMATION ON ADDITIONAL TRAINING	
Year	1989-1992
Place	Milwaukee, USA
Institution	The Medical College of Wisconsin
Field of training	Pharmacology and physiology of cardiovascular system
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (name title of course, study programme where it is/was offered, and level of study programme)	Principal teacher of several courses in the field of pharmacology for students of medicine, pharmacy, dental medicine, health studies, at undergraduate, graduate and postgraduate level
Authorship of university/faculty textbooks in the field of the course	Author and translator of several chapters in pharmacology textbooks
Professional, scholarly and artistic articles published in the last five years in the field of the course (5 works at most)	1. Boban, N., Tonkić, M., Grga, M., Milat, A.M., Mudnić, I., Boban, M. Antimicrobial activity of wine in relation to bacterial resistance to medicinal antibiotics (2021) Oeno One, 55 (1), pp. 45-48. 2. Radman, S., Raić, S., Bućan, I., Pribisalić, A., Dunatov, J., Mudnić, I., Boban, M., Pellay, F.X., Kolčić, I., Polašek, O. Searching for carbonylome biomarkers of aging - Development and validation of

	the proteomic method for quantification of carbonylated protein in human plasma (2020) Croatian Medical Journal, 61 (2), pp. 119-125. 3.Režić-Mužinić, N., Mastelić, A., Benzon, B., Markotić, A., Mudnić, I., Grković, I., Grga, M., Milat, A.M., Ključević, N., Boban, M. Expression of adhesion molecules on granulocytes and monocytes following myocardial infarction in rats drinking white wine (2018) PLoS ONE, 13 (5), art. no. e0196842 4. Milat, A.M., Mudnić, I., Grković, I., Ključević, N., Grga, M., Jerčić, I., Jurić, D., Ivanković, D., Benzon, B., Boban, M. Effects of White Wine Consumption on Weight in Rats: Do Polyphenols Matter? (2017) Oxidative Medicine and Cellular Longevity, 2017, art. no. 8315803 5.Boban, M., Stockley, C., Teissedre, P.-L., Restani, P., Fradera, U., Stein-Hammer, C., Ruf, J.-C. Drinking pattern of wine and effects on human health: Why should we drink moderately and with meals? (2016) Food and Function, 7 (7), pp. 2937-2942.
Professional and scholarly articles published in the last five years in subjects of teaching methodology and teaching quality (5 works at most)	
Professional, science and artistic projects in the field of the course carried out in the last five years (5 at most)	Croatian Science Foundation, Principal Investigator, Project 8652 „BioWine“ 2014-2019,
The name of the programme and the volume in which the main teacher passed exams in/acquired the methodological-psychological-didactic-pedagogical group of competences?-pedagoške kompetencije?	Continuing education course *Skills of medical education and scientific work* at the University of Split School of Medicine
PRIZES AND AWARDS, STUDENT EVALUATION	
Prizes and awards for teaching and scholarly/artistic work	2. Decoration: „Chevalier de l'Ordre du Merite Agricole“, Ministère de l'Agriculture, de l'Alimentation, de la Pêche, de la Ruralité et de l'Aménagement du territoire, The Republic of France, 2011. 3. National science award in the field of Biomedicine for year 2012.
Results of student evaluation taken in the last five years for the course that is comparable to the course described in the form (evaluation organizer, average grade, note on grading scale and course evaluated)	4,5

Title, name and last name of the course leader	**Assistant professor Tihana Boraska Jelavić, MD, PhD**
Title of the course at the proposed study programme	Radiotherapy and Oncology; Planning in Radiotherapy; Evidence based Methodology and Technology in Oncology and Radiotherapy
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	tihana_boraska@yahoo.com
Year of birth	1975
Scientist ID	345685
CROSBI profile ID	32455
Research rank and date of the last appointment	Senior scientific associate, 30.6.2021.
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor since 11/2016; employed since 1.6.2019.
Area and field of appointment into research rank	Oncology and radiotherapy
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Hospital of Split, Department of Health studies university of Split
Date of employment	2014., 1.6.2019.
Job title (professor, researcher, associate teacher, etc.)	Clinical doctor; assistant professor
Field of research	Clinical Oncology
Position in the institution	Clinician, Teacher
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Ph.D.
Institution	School of Medicine Split, University of Split
Place	Split, Croatia
Date	24.3.2007.
INFORMATION ON ADDITIONAL TRAINING	
Year	2019
Place	Toronto Ontario, Canada
Institution	University Health Network
Field of training	Personalized Learning Program in Radiation Medicine Program
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Since 2011. teacher on different courses at Kathedra of Clinical Oncology at Split School of Medicine, University of Split: Medicine, Dental medicine, Pharmacy, Medicine in English; teacher at postgraduate courses: Biology of Neoplasms (Mechanisms of origin and progression of urinary bladder tumors) and at Evidence based clinical medicine (Methodics of clinical research); course leader at Department for Health studies, University of Split undergraduate and graduate level (courses: Evidence based methods and technologies in oncology and radiotherapy; Radiotherapy planning, Radiotherapy and Oncology)
Authorship of university textbooks from the field of the course	Coauthor of „ Clinical Oncology“, editors Šamija M, Vrdoljak E, Krajina Z. Medicinska naklada, Zagreb, 2006.

	Coauthor of „Clinical Oncology“, editors Vrdoljak E, Šamija M, Kusić Z, Petković M, Gugić D, Krajina Z. Medicinska naklada, Zagreb, 2013. Coauthor of „Clinical Oncology“, editors Vrdoljak E, Belac Lovasić I, Kusić Z, Gugić D, Juretić A. Medicinska naklada, Zagreb, 2018.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Vrdoljak J, Boban T, Petrić Miše B, **Boraska Jelavić T**, Bajić Ž, Tomić S, Vrdoljak E. Efficacy and safety of TC dose-dense chemotherapy as first-line treatment of epithelial ovarian cancer: a single-institution retrospective cohort study. Jpn J Clin Oncol. 2019 Feb 23. pii: hyz011. doi: 10.1093/jjco/hyz011. [Epub ahead of print] 2. **Boraska Jelavić T**, Boban T, Brčić L, Vrdoljak E. Is macrocytosis a potential biomarker of the efficacy of dose-dense paclitaxel-carboplatin combination therapy in epithelial ovarian cancer patients? Anticancer Drugs 2017;28(8):922-927. 3. **Jelavić TB**, Miše BP, Ban M, Strikić A, Vrdoljak E. Adjuvant Chemotherapy in Locally advanced Cervical Cancer after Treatment with Concomitant Chemoradiotherapy- Room for Improvement? Anticancer Research 2015;35 (7):4161-4165 4. Omrcen T, Hrepic D, **Boraska Jelavić T**, Vrdoljak E. Combination of adjuvant radiotherapy and androgen deprivation therapy after radical prostatectomy in high risk prostate cancer patients - results from retrospective analysis. J Buon 2015;20(4):1061-7. 5. Vrdoljak E, Petrić Miše B, **Boraska Jelavić T**, Tomić S, Šundov D, Strikić A. Optimal follow-up of ovarian cancer patients. Magazine of European Medical Oncology. 2015;8(1):57-61.DOI: 10.1007/s12254-014-0188-y. ISSN 1865-5041
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	2008. The course of continuing medical education: „Skills of medical education and scientific work“ held at School of Medicine Split, University of Split
PRIZES AND AWARDS	
Prizes and awards for teaching and research	2014. Award for best young oncology researcher of Croatian Oncology Society

Title, name and last name of the course leader	**Assistant professor Igor Borić, MD, PhD**
Title of the course at the proposed study programme	Radiological propaedeutic Radiological anatomy and pathology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	igor.boric@svkatarina.hr
Year of birth	1966
Scientist ID	253942
CROSBI profile ID	20998
Research rank and date of the last appointment	Scientific Associate, 2012.
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor, 2017
Area and field of appointment into research rank	Biomedicine and Health, Clinical Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split, University Department of Health Studies St. Catherine Specialty Hospital, Zagreb
Date of employment	2021 (University of Split, University Department of Health Studies/cumulative working time) 2011 (St. Catherine Specialty Hospital, Zagreb)
Job title (professor, researcher, associate teacher, etc.)	Assistant professor Hospital Director
Field of research	- Radiological diagnostics - Radilogical diagnosis and treatment in patients with musculoskeletal disorders - research of new radiological diagnostic methods of the musculoskeletal system and spine
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	School of Medicine, University of Zagreb
Place	Zagreb, Croatia
Date	2011
INFORMATION ON ADDITIONAL TRAINING	
Year	1994 - 1997
Place	Zagreb, Croatia
Institution	Clinical Hospital Center Zagreb
Field of training	Specialization in Radiology
Year	1996 - 2001
Place	Zagreb, Croatia
Institution	School of Medicine, University of Zagreb
Field of training	Postgraduate study in Radiology
Year	1997
Place	Prague, Czech Republic
Institution	General University Hosptal Prague
Field of training	European School of Magnetic Resonance Imaging
Year	1999
Place	Pisa, Italy
Institution	University Hosptal Pisa
Field of training	European School of Magnetic Resonance Imaging

Year	2004
Place	Augsburg, Germany
Institution	Augsburg University Clinic
Field of training	Musculoskeletal radiology
Year	2006
Place	Zürich, Switzerland
Institution	Balgrist Hospital
Field of training	Musculoskeletal radiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English – excellent (5) German – excellent (5)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	Functional anatomy of the locomotor system, Naklada Ljevak, 2021 Radiological diagnosis of sports injuries, Pećina M. i suradnici. Sports medicine. Medicinska naklada Zagreb, 2019. 107-136. The use of microfragmented adipose tissue with stromal vascular fraction in the treatment of articular cartilage damage: the experience of the doctor of the St. Catherine Specialty Hospital; u: Sertić J, Gamulin S, Sedić F. MOLEKULAR GENETICS – innovations in diagnostic and therapy, Medicinska naklada, Zagreb, 2018. Radiological imaging of a patient with low back pain; u Grazio S, Buljan D. Križobolja. Naklada Slap, Zagreb 2008, 165-198. Magnetic resonance imaging in the diagnosis of sports injuries; u Elabjer E. Sports traumatology, Medicinska naklada Zagreb 2007, 15-21.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Zenic L, Polancec D, Hudetz D, Jelec Z, Rod E, Vidovic D, Staresinic M, Sabalic S, Vrdoljak T, Petrovic T, Cukelj F, Molnar V, Cemerin M, Matisic V, Brlek P, Djukic Koroljevic Z, Boric I, Lauc G, Primorac D. Polychromatic Flow Cytometric Analysis of Stromal Vascular Fraction from Lipoaspirate and Microfragmented Counterparts Reveals Sex-Related Immunophenotype Differences. Genes (Basel). 2021 Dec 16;12(9):1999. doi.org/10.3390/genes12121999. 2. Primorac D, Molnar V, Matišić V, Hudetz D, Jeleč Ž, Rod E, Čukelj F, Vidović D, Vrdoljak T, Dobričić B, Antičević D, Smolić M, Miškulin M, Ćaćić D, Borić I. Comprehensive Review of Knee Osteoarthritis Pharmacological Treatment and the Latest Professional Societies' Guidelines. *Pharmaceuticals*. 2021; 14(3):205. https://doi.org/10.3390/ph14030205. 3. Primorac D, Molnar V, Rod E, Jeleč Ž, Čukelj F, Matišić V, Vrdoljak T, Hudetz D, Hajsok H, Borić I. Knee Osteoarthritis: A Review of Pathogenesis and State-Of-The-Art Non-Operative Therapeutic Considerations. Genes (Basel). 2020 Jul 26;11(8):854. doi: 10.3390/genes11080854.

	4. Borić I, Matišić V, Pavlović T, Cvrtila D. Imaging of the articular cartilage repair. Medicina Fluminensis 2020; 56 (3); 201-209. 5. Borić I, Hudetz D, Rod E, Jeleč Ž, Vrdoljak T, Skelin A, Polašek O, Plečko M, Trbojević-Akmačić I, Lauc G, Primorac D. A 24-month Follow-up Study of the Effect of Intraarticular Injection of Autologous Microfragmentet Fat Tissue on Proteoglycan Synthesis in Patient with Knee Osteoarthritis. Genes (Basel). 2019 Dec 17;10(12). pii: E1051. doi: 10.3390/genes10121051.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. Active participation in the Seventh Framework Programme: „Multi-dimensional OMICS approach to stratification of patient with low-back pain – "PAIN OMICS" Project code: Health 2013.2.2.1-5; Grant agreement 602736 Project duration: 2013 – 2018 2. Active participation in the project "Possibility of treating injuries and damage to articular cartilage"; project manager: project code: 01080996
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Ascoc. Prof. Joško Božić, MD, PhD**
Title of the course at the proposed study programme	Pathophysiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	josko.bozic@mefst.hr
Year of birth	1985
Scientist ID	326460
CROSBI profile ID	30423
Research rank and date of the last appointment	Senior research associate (22.01.2020.)
Research and teaching or teaching rank, and the date of the last appointment	Associate Professor (21.04.2020.)
Area and field of appointment into research rank	Biomedicine and Health Clinical Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split School of Medicine
Date of employment	14.01.2011.
Job title (professor, researcher, associate teacher, etc.)	Associate Professor
Field of research	Pathophysiology
Position in the institution	Vice-Dean for Medical Studies in English Deputy Head of the Department of Pathophysiology Head of the Department of Diploma Thesis
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Medical Sciences (PhD)
Institution	University of Split School of Medicine
Place	Split
Date	2016
INFORMATION ON ADDITIONAL TRAINING	
Year	/
Place	/
Institution	/
Field of training	/
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English – excellent (5)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German – sufficient (2)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Pathophysiology course leader (Dental Medicine Studies, Medical Studies in English)
Authorship of university textbooks from the field of the course	Tičinović Kurir T et al. Pathophysiology of endocrinopathies – chosen chapters. Split, Naklada Redak, 2013. (University textbook) - author of the chapter
Professional and research papers	1. Borovac JA, Glavas D, Susilovic Grabovac Z, Supe Domic D, D'Amario D, Bozic J. Catestatin in Acutely Decompensated Heart Failure

published in the last five years from the field of the course **(max 5 references)**	Patients: Insights from the CATSTAT-HF Study. J Clin Med. 2019;8(8). pii: E1132. 2. Borovac JA, Dogas Z, Supe-Domic D, Galic T, Bozic J. Catestatin serum levels are increased in male patients with obstructive sleep apnea. Sleep Breath. 2019;23(2):473-481. 3. Tadin Hadjina I, Zivkovic PM, Matetic A, Rusic D, Vilovic M, Bajo D, Puljiz Z, Tonkic A, Bozic J. Impaired neurocognitive and psychomotor performance in patients with inflammatory bowel disease. Sci Rep. 2019;9(1):13740. doi: 10.1038/s41598-019-50192-2. 4. Bozic J, Borovac JA, Galic T, Kurir TT, Supe-Domic D, Dogas Z. Adropin and Inflammation Biomarker Levels in Male Patients With Obstructive Sleep Apnea: A Link With Glucose Metabolism and Sleep Parameters. J Clin Sleep Med. 2018;14(7):1109-1118. 5. Vilovic M, Dogas Z, Ticinovic Kurir T, Borovac JA, Supe-Domic D, Vilovic T, Ivkovic N, Rusic D, Novak A, Bozic J. Bone metabolism parameters and inactive matrix Gla protein in patients with obstructive sleep apnea. Sleep. 2019 Oct 21. pii: zsz243. doi: 10.1093/sleep/zsz243. [Epub ahead of print].
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	/
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	2014 – present, scientific project "Translational research on neuroplasticity of breathing and effect of intermittent hypoxia in anesthesia and sleep", HRZZ (investigator) 2018.- present„ "Normative models of vascular biomarkers for improving cardiovascular risk stratification in primary and secondary prevention" HRZZ (investigator)
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Skills course of medical education and scientific work, University of Split School of Medicine, 2019.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	2011 - Award of the Faculty Council for outstanding achievement during the study, University of Split School of Medicine 2013 – Best poster presentation award at the 5th Croatian Diabetes Congress with international participation, Pula, Croatia 2014 - Award for best rated teacher according to student survey results (Dental medicine study) 2018 - Award for best rated teacher according to student survey results (Medical Studies in English) 2019 - Award for best rated teacher according to student survey results (Medical Studies in English)

Title, name and last name	**Assist. Prof. Anteo Bradarić Šlujo, MD, PhD**
Title of the course at the proposed study programme	Pathophysiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	anteo.bradaric@gmail.com
Year of birth	1963.
Scientist ID	281640
CROSBI profile ID	23574
Research rank and date of the last appointment	scientific associate; 2014
Research and teaching or teaching rank, and the date of the last appointment	Assist. Prof. - 23.07.2014.
Area and field of appointment into research rank	biomedicine and health, clinical medical sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Hospital of Split; University of Split School of Medicine
Date of employment	1995.
Job title (professor, researcher, associate teacher, etc.)	Cardiology specialist; assistant professor
Field of research	Cardiovascular diseases, Pathophysiology
Position in the institution	Executor
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Medical Sciences (PhD)
Institution	University of Zagreb School of Medicine
Place	Split
Date	2012
INFORMATION ON ADDITIONAL TRAINING	
Year	2009.
Place	Split
Institution	University Hospital of Split
Field of training	Interventional cardiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 4/5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Elective classes in interventional cardiology and electrocardiograms Pathophysiology of the cardiovascular system
Authorship of university textbooks from the field of the course	Clinical pathophysiology - etiopathogenetic nodes 2013 (chapter author)
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Borovac JA, D'Amario D, Schwarz K, Bradarić A, Božić J, Glavaš D. The effect of P2Y12 inhibitor pretreatment vs. no pretreatment on major bleeding among patients with NSTE-ACS: an updated meta-analysis and meta- regression pooling 41,548 patients from 11 studies. Eur Heart J. Digital Experience: Oxford University Press, 2021. 2. Borovac JA, D'Amario D, Glavas D, Sušilović Grabovac Z, Šupe Domić D, Novak K, Bradarić A, Miličić D, Duplančić D, Božić J. The S2PLIT-UG score, a novel system identifying patients with a

	high risk of all- cause mortality following acute decompensation of heart failure, correlates with levels of sST2, hs-cTnI and NT-proBNP. Eur J Heart Fail. 2020;22:27-28. 3. Borovac JA, Božić J. Sušilović Grabovac Z, Šupe Domić D, Tičinović Kurir T, Bradarić A, Živković PM, Vilović M, Novak K, Glavaš D. Catestatin serum levels are inversely associated with adverse structural and hemodynamic profile among patients with acutely decompensated heart failure: preliminary echocardiographic findings. Abstracts of the Heart Failure. 2019; pp. 112-113. 4. Giunio L, Lozo M, Bradarić A, Zanchi J, Giunio L. Coronary perforation in STEMI PCI simultaneously treated by pericardiocent esis and covered stent implantation. How to manage coronary perforation Part 2. EuroPCR. 2018. 5. Giunio L, Lozo M, Bradarić A, Zanchi J, Giunio L. When less is more. How to manage left stem dissections. EuroPCR. 2018.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	/
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	/
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	As part of the acquisition of the scientific - teaching title of assistant professor, passed the Skills course of medical education and scientific work, University of Split School of Medicine, 2014.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	/

Title, name and last name of the course leader	**Danijela Budimir Mršić, MD, PhD, lecturer**
Title of the course at the proposed study programme	Contrast Media
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	danijelabudimir@gmail.com
Year of birth	1982
Scientist ID	302604
CROSBI profile ID	23881
Research rank and date of the last appointment	Research associate, 2012
Research and teaching or teaching rank, and the date of the last appointment	Lecturer, 2014
Area and field of appointment into research rank	Biomedicine and health, Clinical medical sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Clinical Hospital Split
Date of employment	2013
Job title (professor, researcher, associate teacher, etc.)	Medical doctor
Field of research	Radiology
Position in the institution	Specialist in Clinical Radiology
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Split, School of Medicine
Place	Split
Date	2012
INFORMATION ON ADDITIONAL TRAINING	
Year	2018-2019
Place	Zagreb
Institution	University of Zagreb, School of Medicine
Field of training	Postgraduate study in Clinical Radiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	French 3
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	- Chapter in a book: Tuberkuloza - stara dama u novom ruhu, Eds. Jurčev Savičević A, Miše K et al., Medicinska naklada, Zagreb; 2021: ch. Radiološka dijagnostika tuberkuloze pluća, Tadić T, Budimir Mršić D, Škopljanac I, p. 71-79

Professional and research papers published in the last five years from the field of the course **(max 5 references)**	• The applicability of magnetic resonance imaging classification system (MRICS) for cerebral palsy and its association with perinatal factors and related disabilities in a Croatian population-based sample. Lovrić Kojundžić S, **Budimir Mršić D**, Jelovina I, Benzon B, Tomasović M. *Croat Med J*. 2021;62(4):367-375. • Pulmonary embolism associated with COVID-19 occurs in predominantly elderly patients with comorbidities: A Single Center Retrospective Study**. Budimir Mršić D**, Perković-Tabak L, Ćavar M, Luetić A, Petričević M, Dolić K. *Gerontology and Geriatric Medicine 2021;7:1-5.* • Normative equations for central augmentation index: assessment of inter-population applicability and how it could be improved. Jeroncic A, Gunjaca G, **Budimir Mršić D**, Mudnic I, Brizic I, Polasek O, Boban M. *Scientific Reports*. 2016;6:27016. • Hyperbaric oxygenation affects the mechanisms of acetylcholine-induced relaxation in diabetic rats. Unfirer S, Mihalj M, Novak S, Kibel A, Cavka A, Mihaljevic Z, Gros M, Brizic I, **Budimir D**, Cosic A, Boban M, Drenjancevic I. *Undersea and Hyperbaric Medicine*. 2016;43(7):787-803. • Wine and bone health – a review. Kutlesa Z, **Budimir Mršić D**. *J Bone Miner Metab.* 2016;34(1):11-22.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	/
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	/
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	/
PRIZES AND AWARDS	
Prizes and awards for teaching and research	/

Title, name and last name	**Assistant professor Ana Ćurković, PhD**
Title of the course at the proposed study programme	Sociology of Health Health Care Ethics
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	ana.curkovic@ozs.unist.hr
Year of birth	1988.
Scientist ID	336731
CROSBI profile ID	31752
Research rank and date of the last appointment	/
Research and teaching or teaching rank, and the date of the last appointment	assistant professor, 24.11.2020.
Area and field of appointment into research rank	Area of biomedicine and health, field of public health and health care, branch of social medicine
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split, University Department of Health Studies
Date of employment	1.4.20212.
Job title (professor, researcher, associate teacher, etc.)	assistant professor
Field of research	Social medicine
Position in the institution	assistant professor
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	Split School of Medicine
Place	Split
Date	29.10.2018.
INFORMATION ON ADDITIONAL TRAINING	
Year	/
Place	/
Institution	/
Field of training	/
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 4
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Previous participation in courses as a teaching assistant and postdoctoral researcher
Authorship of university textbooks from the field of the course	/
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	Lukežić, Marina; Ćurković, Ana; Kolčić, Ivana; Polašek, Ozren. Socioeconomic status and psychological distress do not predict mortality risk in the island population of Vis, Croatia // Journal of Global Health Economics and Policy, 1 (2021), 1; 2021016, 7 doi:10.52872/001c.29662 Rehberg, Joshua; Stipčić, Ana; Ćorić, Tanja; Kolčić, Ivana; Polašek, Ozren. Mortality patterns in Southern Adriatic islands of Croatia: a

	registry-based study // Croatian Medical Journal, 59 (2018), 3; 118-123 doi:10.3325/cmj.2018.59.118 Stipčić, Ana. Važnost socioekonomskih pokazatelja u određivanju zdravlja i zdravstvenih rizika u južnoj Hrvatskoj, 2018., doktorska disertacija, Medicinski fakultet Split, Split. Šolić, Ivana; Stipčić, Ana; Pavličević, Ivančica; Marušić, Ana Transparency and public accessibility of clinical trial information in Croatia: how it affects patient participation in clinical trials // Biochemia Medica: The journal of The Croatian Society of Medical Biochemistry and Laboratory Medicine, 27 (2017), 2; 259-269 doi:10.11613/BM.2017.027.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	Antičević, Vesna; Sindik, Joško; Klarin, Mira; Đogaš, Varja; Stipčić, Ana; Kardum, Goran; Barač, Ivana; Zoranić, Sanja; Perković Kovačević, Marina Effects of social skills training among freshman undergraduate nursing students: a randomized controlled trial // Medica Jadertina, 48 (2018), 1-2; 23-32
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	/
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Professional development: Development and improvement of pedagogical competencies of university teachers. University of Split, Faculty of Philosophy, CIRCO - Center for Lifelong Research and Development Education (2014)
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Award for the best poster presentation in the category of young researchers, HandsOn: Biobanks 2014, Helsinki, Finland.

Title, name and last name of the course leader	**Assistant professor Krešimir Dolić, MD, PhD**
Title of the course at the proposed study programme	MRI Radiological Image Receptors Theories of Imaging
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	kdolic@mefst.hr
Year of birth	1979
Scientist ID	345244
CROSBI profile ID	32462
Research rank and date of the last appointment	May 2015. Assist.prof.
Research and teaching or teaching rank, and the date of the last appointment	PhD, April 2013. Associate professor, 25.11.2021.
Area and field of appointment into research rank	Biomedicine and Health, branch Radiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University hospital Split/Medical school Split
Date of employment	01.12.2006./30.11.2016.
Job title (professor, researcher, associate teacher, etc.)	Associate professor
Field of research	Clinical radiology
Position in the institution	Head of radiology department/ assist.prof.
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Assist.prof/subspecialist in neuroradiology
Institution	Medical school Split/University hospital Split
Place	Split
Date	2015/2017
INFORMATION ON ADDITIONAL TRAINING	
Year	2010-2011, 2013
Place	Buffalo, New York
Institution	Buffalo neuroimaging analysis center/Memorial Sloan Kettering
Field of training	Neuroradiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English - 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian - 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	

Authorship of university textbooks from the field of the course	**1.** Besenski N, Jankovic S, Buca A. **Clinical Radiology of the brain**. Coauthor in „Infective and inflammatory disease of the brain". Medicinska naklada Zagreb. 2011. **2.** Bešenski N, Jankovic S. „**Neuroradiology of the spine**". First author in „ Demyelinating disease of the spine" and „ Infective disease of the spine" and coauthor in "Metabolic disease of the spine" .Medicinska naklada Zagreb. 2013. **3.** Vrdoljak E, Samija M, Kusic Z, Petkovic M, Gugic D, Krajina Z. "Clinical oncology". Medicinska naklada Zagreb, 2013. – contributor. **4.** Saba L, Raz E. **Neurovascular Imaging: From Basics to Advanced Concepts**. First author of chapter: »CCSVI« . Springer-Verlag New York, 2016 **5.** Drviš P, Otorhinolaryngology with head and neck surgery, Autor of the chapter: **Radiological diagnostics of hearing disorders** Redak, Split 2019
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Pavicic Ivelja M, **Dolic K**, Marasovic Krstulovic D, Glavina G, Ivic I. Case of Acute Disseminated Encephalomyelitis Associated with Cytomegalovirus Reactivation in an Immunocompromised Systemic Lupus Erythematosus Patient. Medicina (Kaunas). 2021 Aug 27;57(9):882. 2. Mihalj M, Dolić K, Jurinović P, Miše NI, Titlić M, Pintarić I. Multiple intracranial schwanomas: case report. Acta Clin Croat. 2016 Jun;55(2):331-3. 3. Pavicic Ivelja M, Ivic I, **Dolic K**, Mestrovic A, Perkovic N, Jankovic S. Evaluation of cerebrovascular reactivity in chronic hepatitis C patients using transcranial color Doppler. Plos One. 2019 Jun 11;14(6). 4. Mihalj M, **Dolić K**, Kolić K, Ledenko V. CSF tap test - Obsolete or appropriate test for predicting shunt responsiveness? A systemic review. J Neurol Sci. 2016 Mar 15;362:78-84.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Full Professor (tenure) Irena Drmić Hofman, PhD, MSc**
Title of the course at the proposed study programme	Biochemistry
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	idhofman@ozs.unist.hr
Personal web page	https://www.bib.irb.hr/pregled/profil/25009
Year of birth	1965
Scientist ID	219413
CROSBI profile ID	25009
Research rank and date of the last appointment	Scientific Advisor with Tenure, July 26, 2019
Research and teaching or teaching rank, and the date of the last appointment	Full Professor with Tenure, December 18, 2019
Area and field of appointment into research rank	Biomedicine and Health, Basic Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split School of Medicine
Date of employment	1 April 1995
Job title (professor, researcher, associate teacher, etc.)	Full Professor with Tenure
Field of research	Biochemistry and Molecular Biology
Position in the institution	Head of Department of Chemistry and Biochemistry
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies, University of Split
Date of employment	20 April 2021
Job title (professor, researcher, associate teacher, etc.)	Full Professor with Tenure
Field of research	Biochemistry and Laboratory Diagnostics
Position in the institution	Assistant to the Head for Science and International Cooperation
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of School of Zagreb School of Medicine
Place	Zagreb, Croatia
Date	27 October 2003
INFORMATION ON ADDITIONAL TRAINING	
Year	1995
Place	Verona, Italy
Institution	Institute of Biology and Genetics, School of Medicine
Field of training	Molecular genetics and Population genetics
Year	1998, 1999, 2000, 2001
Place	Bielefeld, Germany
Institution	Institute for Cell Culture Technology, University of Bielefeld
Field of training	Glycomics
Year	2004-2005
Place	Münster, Germany
Institution	University of Münster, Institute for Medical Physics and Biophysics
Field of training	Tumor Glycomics (DAAD Fellowship)
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
English	5
Italian	4
German	2
COMPETENCES FOR THE COURSE	

Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	1. Nutrition and Health (elective course, Study of Medicine) 2. Biochemistry (University of Split Department of Health Studies, USDHS, undergraduate study) 3. Biochemistry 2 (USDHS, undergraduate study) 4. Molecular Biology Techniques in Medicine (USDHS, undergraduate study) 5. Molecular Methods in Tumor Diagnostics, Tumor Glycomics, Molecular Research Methods in Glycomedicine (elective courses, University of Split School of Medicine, Postgraduate study Tumor Biology) 6. Diagnostic of Genetic and Chromosomal Disorders, (elective course, University of Split School of Medicine, Postgraduate study TRIBE)
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1.Oršolić I, Bursać S, Jurada D, Drmić Hofman I, Dembić Z, Bartek J, Mihalek I, Volarević S. Cancer-associated mutations in the ribosomal protein L5 gene dysregulate the HDM2/p53-mediated ribosome biogenesis checkpoint. *Oncogene*. 2020; 39(17):3443-57. 2. Galusic D, Lucijanic M, Livun A, Radman M, Blaslov V, Vicelic Cutura L, Petric M, Miljak A, Lucijanic J, Drmic Hofman I, Kusec R. Higher AURKA and PLK1 expression are associated with inferior overall survival in patients with myelofibrosis. *Blood Cells Mol Dis*. 2020:102396. 3. Galusic D, Lucijanic M, Livun A, Radman M, Lucijanic J, Drmic Hofman I, Kusec R. CDC25c expression in patients with myelofibrosis is associated with stronger myeloproliferation and shorter overall survival. *Wien Klin Wochenschr*. 2020. doi: 10.1007/s00508-020-01738-2. 4.Šupe-Domić D, Milas G, Stanišić L, Drmić Hofman I, Martinović Klarić I. Reference intervals for six salivary cortisol measures based on the Croatian Late Adolescence Stress Study (CLASS). *Biochem Med* (Zagreb). 2018;28(1):010902. 5.Milas G, Šupe-Domić D, Drmić Hofman I, Rumora L, Martinović Klarić I. Weather conditions: a neglected factor in human salivary cortisol research? *Int J Biometeorol* 2018; 62(2):165-75.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	1. Drmić Hofman I. Metode molekularne genetike u leukemijama i limfomima. U: genetičko informiranje u praksi. Čulić V, Pavelić J, Radman M (Ur.). Medicinska naklada, Zagreb, 2016.
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. Regulation of receptor-mediated mitophagy in erythroid lineage cells - MitoReg. PI: Assoc. Prof. Ivana Novak Nakir, Financed by Croatian Science Foundation (IP-2020-02, duration 2021-2025)
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	1. IUBMB International Workshop on Biochemistry Education, University of Split School of Medicine, Croatia, 2011. 2. FEBS Workshop on Education in Biochemistry and Molecular Biology, Opatija, Croatia, 2010.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Asst. Prof. Varja Đogaš, MD, PhD**
Title of the course at the proposed study programme	Health Care Psychology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	varjagd@gmail.com
Year of birth	1964.
Scientist ID	346596
CROSBI profile ID	32592
Research rank and date of the last appointment	Assistant Professor, August 1, 2017
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor
Area and field of appointment into research rank	Biomedicine and health, Basic medical sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	School of Medicine University of Split Faculty of Humanities and Social Sciences University of Split
Date of employment	February 1, 2009
Job title (professor, researcher, associate teacher, etc.)	Assistant Professor
Field of research	Psychological Medicine
Position in the institution	Head of the department of Psychological Medicine
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	School of Medicine University of Split
Place	Split
Date	February 23, 2015
INFORMATION ON ADDITIONAL TRAINING	
Year	2021
Place	Zagreb
Institution	Institute of Group Analysis,
Field of training	Group analysis
INFORMATION ON ADDITIONAL TRAINING	
Year	2022
Place	Zagreb
Institution	Croatian Society of Psychoanalytic Psychotherapy
Field of training	Psychoanalytic Psychotherapy
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English - 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian - 3
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Deutch - 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it	Undergraduate education: Psychological medicine I and Psychological medicine II (Medicine, Medical Studies in English) Psychological medicine (Dental Medicine)

is/was held, and level of study programme)	Doctoral education: Communication Skills
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Žuljević, Marija Franka; Jeličić, Karlo; Viđak, Marin; **Đogaš, Varja**; Buljan, Ivan Impact of the first COVID-19 lockdown on study satisfaction and burnout in medical students in Split, Croatia: a cross-sectional presurvey and postsurvey *// BMJ Open,* **11** (2021), 6; e049590, 11 doi:10.1136/bmjopen-2021-049590 2. Antičević, Vesna; Sindik, Joško; Klarin, Mira; **Đogaš, Varja**; Stipčić, Ana; Kardum, Goran; Barać, Ivana; Zoranić, Sanja; Perković Kovačević, Marina Effects of social skills training among freshman undergraduate nursing students: a randomized controlled trial *// Medica Jadertina,* **48** (2018), 1-2; 23-32 3. Antičević, Vesna; Sindik, Joško; Klarin, Mira; **Đogaš, Varja**; Stipčić, Ana; Kardum, Goran; Barać, Ivana; Zoranić, Sanja; Perković Kovačević, Marina Effects of social skills training among freshman undergraduate nursing students: a randomized controlled trial *// Medica Jadertina,* **48** (2018), 1-2; 23-32 4. **Đogaš, Varja**; Donev, Doncho M.; Kukolja-Taradi, Sunčana; Đogaš, Zoran; Ilakovac, Vesna; Novak, Anita; Jerončić, Ana No difference in the intention to engage others in academic transgression among medical students from neighboring countries: a cross-national study on medical students from Bosnia and Herzegovina, Croatia, and Macedonia *// Croatian medical journal,* **57** (2016), 4; 381-391 doi:10.3325/cmj.2016.57.381
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	Internationalization of study programs at all levels at the Faculty of Medicine in Split - Operational Program "Effective Human Resources (2014-2020) – associate Project MEDICINSKA +; – associate
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Duška Glavaš, MD, PhD, Assistant Professor**
Title of the course at the proposed study programme	Internal medicine
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	duska.glavas@gmail.com
Year of birth	1961.
Scientist ID	232325
CROSBI profile ID	
Research rank and date of the last appointment	31. 03. 2000, Master work 08. 06. 2010, PhD
Research and teaching or teaching rank, and the date of the last appointment	03.02.2011, assistant 20.04.2017, assistant professor
Area and field of appointment into research rank	
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Clinical Hospital Split University Split, Medical school
Date of employment	1.10.1990, Clinical Hospital Split 20.04.2017, Medical school, University Split
Job title (professor, researcher, associate teacher, etc.)	Cardiologist Assistant prof., Internal medicine, Clinical skills
Field of research	Clinical medicine sciences
Position in the institution	The head of Intensive care unit, Clinic for cardiovascular diseases, Clinical Hospital Split
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD,
Institution	Split Medical School
Place	Split
Date	8.6.2010
INFORMATION ON ADDITIONAL TRAINING	
Year	1988-1898, Clinical pharmacology department Basel
Place	Basel, Switzerland
Institution	Human Pharmacology Lab.
Field of training	Clinical pharmacology, Cardiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Course for teachers organized by Split Medical School

Authorship of university textbooks from the field of the course	1. Glavas D. Pulmonary thromboembolism and deep venous thrombosis-guidelines for prevention. In: Mirić D, et all. Preventive cardiology. HKD 1997; 459-70. 2. Glavas D. Smoking and heart. In: Miric D, at all. Contemporary life and heart. HKD 2001; 245-275. 3. Vukovic I, Duplancic D, Glavas D. Diagnostics of peripheral vascular diseases by ultrasound. In Hozo I, Karelovic D, et all. Ultrasound in clinical praxis. Croatian gastroenterology society 2004; 369-423. 4. Glavas D. Smoking and coronary diseases. In Mirić D, et all. Coronary diseases 2006; 32-46.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Borovac JA, Orsolic A, Miric D, **Glavas D**. The use of Smith-modified Sgarbossa criteria to diagnose an extensive anterior acute myocardial infarction in a patient presenting with a left bundle branch block. J Electrocardiol. 2021;64:80-84. 2. Borovac JA, D'Amario D, Bozic J, **Glavas D**. Sympathetic nervous system activation and heart failure: Current state of evidence and the pathophysiology in the light of novel biomarkers. World J Cardiol. 2020;12:373-408. 3. Borovac JA, **Glavas D**, Susilovic Grabovac Z, Supe Domic D, Stanisic L, D'Amario D, Kwok CS, Bozic J. Circulating sST2 and catestatin levels in patients with acute worsening of heart failure: a report from the CATSTAT-HF study. ESC Heart Fail. 2020;7:2818-2828. 4. Borovac JA, **Glavas D**, Susilovic Grabovac Z, Supe Domic D, Stanisic L, D'Amario D, i sur. Right Ventricular Free Wall Strain and Congestive Hepatopathy in Patients with Acute Worsening of Chronic Heart Failure: A CATSTAT-HF Echo Substudy. J Clin Med. 2020;9:1317-1 5. Seferovic PM, Jankowska E, Coats AJS, Maggioni AP, Lopatin Y, Milinkovic I, Polovina M, Lainscak M, Timmis A, Huculeci R, Vardas P...**Glavas D**, et al. The Heart Failure Association Atlas: rationale, objectives, and methods. Eur J Heart Fail. 2020;22:638-645.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Prizes of Croatian Medical Chamber 2021 for medical and scientific work

Title, name and last name	**Professor Ivica Grković, MD, PhD, full professor**
Title of the course at the proposed study programme	Anatomy
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	Ivica.grkovic@mefst.hr
Year of birth	1964
Scientist ID	173423
CROSBI profile ID	13898
Research rank and date of the last appointment	Scientific advisor, Biomedicine and Health – Preclinical medicine - Anatomy, since 2009
Research and teaching or teaching rank, and the date of the last appointment	Full tenured professor of Anatomy, since 2014
Area and field of appointment into research rank	Biomedicine and Health: - Basic Medical Sciences - Anatomz
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split School of Medicine
Date of employment	September 2004
Job title (professor, researcher, associate teacher, etc.)	Full tenured professor
Field of research	Anatomy
Position in the institution	Head, Department of anatomy
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Melbourne, Department of anatomy and neuroscience
Place	Melbourne, Australia
Date	1997.
INFORMATION ON ADDITIONAL TRAINING	
Year	1992-2004
Place	Melbourne, Australia
Institution	The University of Melbourne
Field of training	Anatomy, neurobiology of the autonomic nervous system
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English – excellent (5)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian – sufficient (2)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	'Lecturer' (1998-2002) i 'Senior Lecturer' (2003-2004); Anatomy and neuroscience, The University of Melbourne
Authorship of university textbooks from the field of the course	An@tomedia (A New Approach to Medical Education: Developments in Anatomy) Norman Eizenberg, Christopher Briggs, Priscilla Barker, Ivica Grkovic Mc Graw Hill Education, http://anatomediaonline.com/

Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Ključević N, Boban D, Milat AM, Jurić D, Mudnić I, Boban M, **Grković I**. (2019) Expression of Leukocytes Following Myocardial Infarction in Rats is Modulated by Moderate White Wine Consumption. Nutrients. 11(8). pii: E1890. doi: 10.3390/nu11081890. 2. Ljubkovic M, Gressette M, Bulat C, Cavar M, Bakovic D, Fabijanic D, **Grkovic I**, Lemaire C, Marinovic J. (2019) Disturbed Fatty Acid Oxidation, Endoplasmic Reticulum Stress and Apoptosis in Left Ventricle of Patients with Type 2 Diabetes Mellitus. Diabetes. 68(10):1924-33. doi: 10.2337/db19-0423. 3. Režić-Mužinić N, Mastelić A, Benzon B, Markotić A, Mudnić I, **Grković I**, Grga M, Milat AM, Ključević N, Boban M. (2018) Expression of adhesion molecules on granulocytes and monocytes following myocardial infarction in rats drinking white wine. PLoS One.13(5) e0196842. doi: 10.1371/journal.pone.0196842. 4. Agnic I, Filipovic N, Vukojevic K, Saraga-Babic M, **Grkovic I**.(2018) Isoflurane post-conditioning influences myocardial infarct healing in rats. Biotech Histochem. 93(5):354-63. doi: 10.1080/10520295.2018.1443507. 5. Ključević N, Milat AM, Grga M, Mudnić I, Boban M, **Grković I**. (2017) White Wine Consumption Influences Inflammatory Phase of Repair After Myocardial Infarction in Rats. J Cardiovasc Pharmacol. 70(5):293-99.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	1. Sapunar D, Marušić M, Puljak L, **Grković I**, Malički M, Marušić A, Čivljak M, Tanjić Ž. (2018) The Medical School of the Catholic University of Croatia: Principles, Goals, Standards and Organization. Acta Med Acad. 47(1):61-75. 2. Sapunar D, **Grković I**, Lukšić D, Marušić M. (2016) Management of teaching processes using the Share point platform: A case study from the University of Split School of Medicine. *Acta Med Acad.* 45(1):34-8. 3. Sapunar D, **Grković I**, Lukšić D, Marušić M. (2016) The business process management software for successful quality management and organization: A case study from the University of Split School of Medicine. *Acta Med Acad.* 45(1):26-33.
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	**1. Croatian Research Foundation: "Biological effects of wine: the influence of vinification technology, dealcoholisation and aging of wine" 2015.-2019.- research fellow**
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Courses on Anatomy (since 1989) and Neuroscience (since 1993), from instructor/tutor to full tenured professor.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	2015.: Best teacher award in Dental medicine course in 2014/15. 2019.: Best teacher award in Dental medicine course in 2018/19.

Title, name and last name of the course leader	**Stipan Janković, MD, Full professor with tenure**
Title of the course at the proposed study programme	Radiobiology and Radiation Protection Introduction to Radiology Conventional Radiological Methods Radiological Equipment Basics of radiology and radiation protection
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	stipan.jankovic@ozs.unist.hr
Year of birth	1948
Scientist ID	106463
CROSBI profile ID	11388
Research rank and date of the last appointment	Scientific advisor with tenure
Research and teaching or teaching rank, and the date of the last appointment	Tenured full professor of radiology, 3 December 2004
Area and field of appointment into research rank	Biomedicine and health, clinical medical sciences, radiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies
Date of employment	1 December 2011
Job title (professor, researcher, associate teacher, etc.)	Tenured full professor
Field of research	Radiology (subspecialisation in neuroradiology)
Position in the institution	Head
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	professor, PhD, Prim., MD
Institution	University of Zagreb
Place	Zagreb
Date	2004
INFORMATION ON ADDITIONAL TRAINING	
Year	1985., 1989., 1991., 1993., 1998., 2014. …
Place	University of Zagreb, Lund – Šweden, Karolinska institut – Sweden, Frankfurt, Ospedale San Rafaelle – Milano, Versaille, ST. Joseph hospital – New York, etc.
Institution	University of Zagreb, Lund – Sweden, Karolinska institut – Sweden, Frankfurt, Ospedale San Rafaelle – Milano, Versaille, ST. Joseph hospital – New York, Istanbul, itd.
Field of training	Neuroradiology, Breast radiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	French (3)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (2)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Russian (2)
COMPETENCES FOR THE COURSE	
Earlier experience as course	

teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	Janković, Stipan; Lovrić Kojundžić, Sanja; Čarić, Ana **Osnove radiologije za primalje**, Split: Sveučilište u Splitu, Sveučilišni odjel zdravstvenih studija, 2014 (Autorska) Janković, Stipan; Bešenski, Nada **Klinička neuroradioogija kralježnice i kralježnične moždine**, Zagreb: Medicinska naklada, 2013 (Sveučilišni udžbenik) Janković, Stipan; Čizmić, Jozo **Liječnička pogreška-medicinski i pravni aspekti**, Poslijediplomski tečaj stalnog medicinskog usavršavanja I. kategorije, Split: Impresum, 2007 (zbornik) Janković, Stipan **Mamografija i ultrazvuk dojke**/Poslijediplomski tečaj I. kategorije - tečaj stalnog medicinskog usavršavanja liječnika, Split, 2004, Split: Impresum, 2004 (zbornik) Janković, Stipan; Polić, Stojan; Petričević, Ante; Bačić, Antun **Odabrana poglavlja iz hitne medicine**, Split: Jedinica za znanstveni rad KB Split, 1998 (Autorska) Topić, Elizabeta; Primorac, Dragan; Janković, Stipan; Štefanović, Mario **Medicinska biokemija i laboratorijska medicina u kliničkoj praksi /** Topić, Elizabeta ; Primorac, Dragan ; Janković, Stipan ; Štefanović, Mario (ur.). Zagreb: Medicinska naklada, 2018 Bukovec, Željka; Mirošević, Gorana Endokrinološke i metaboličke bolesti // Medicinska biokemija i laboratorijska medcina u kliničkoj praksi / Topić, Elizabeta ; Primorac, Dragan ; Janković, Stipan ; Štefanović, Mario (ur.). Zagreb: Medicinska naklada, 2018. str. 155-157 Grković, Ivica; Miletić, Damir; Kolić, Krešimir; Janković, Stipan; Glavina, Gordana Radiološka anatomija orofacijalnog područja, anomalije i varijacije // Dentalna radiografija i radiologija Split: Medicinski fakultet Sveučilišta u Splitu, 2009. str. 103-113 Janković, Stipan Rendgenski uređaji // Radiologija / Hebrang, Andrija ; Klarić-Čustović, Ratimira (ur.). Zagreb: Medicinska naklada, 2007. str. 33-56 Drinković, Ivan; Janković, Stipan Bolesti dojke // Radiologija / Hebrang, Andrija ; Klarić-Čustović, Ratimira (ur.). Zagreb: Impresum, 2006. str. 321-329 Janković, Stipan Rentgenski uređaji // Radiologija / Hebrang, Andrija ; Klarić-Čustović, Ratimira (ur.). Zagreb: Impresum, 2006. str. 33-60 Topić, Elizabeta; Salamunić, Ilza; Margetić, Sandra; Getaldić, Biserka; Čulić, Srđana; Dvornik, Štefica; Šimundić, Ana-Maria; Štefanović, Mario; Janković, Stipan; Staničić, Ante Suvremeni pristup medicinskoj dijagnostici u primarnoj zdravstvenoj zaštiti / Topić, Elizabeta ; Janković, Stipan (ur.). Zagreb: Medicinska naklada, 2006

	Seminari iz kliničke radiologije / Janković, Stipan (ur.). Split: Medicinski fakultet, 2005 (monografija) Janković, Stipan Mamografija i ultrazvuk dojke/Poslijediplomski tečaj I. kategorije - tečaj stalnog medicinskog usavršavanja liječnika, Split, 2004.. Split: Impresum, 2004 (zbornik) Medicinskobiokemijska dijagnostika u kliničkoj praksi / Topić, Elizabeta ; Primorac, Dragan ; Janković, Stipan (ur.). Zagreb: Medicinska naklada, 2004 (Udžbenici i skripta) Janković, Stipan; Miše, Stjepan; Jakšić, Ana Uputstva liječnicima pri upućivanju bolesnika na specijalističku dijsgnostiku i specijalističko-konzilijarne preglede u Kliničku bolnicu Split, 2003. (podatak o recenziji nije dostupan, uputstva). Janković, Stipan Acta medica Croatica, tematski broj 2002., 2002. (podatak o recenziji nije dostupan, urednik časopisa). Janković, Stipan; Eterović, Davor Fizikalne osnove i klinički aspekti medicinske dijagnostike Zagreb: Impresum, 2002 Janković, Stipan Odabrana poglavlja iz gastroenterologije // Odabrana poglavlja iz gastroenterologije / Hozo, Izet ; Miše, Stjepan (ur.). Split: Impresum, 1999. str. 1-1 Kalajžić, Josip; Janković, Stipan; Rešić, Biserka Magnetska rezonancija: Naša iskustva u neuroradiologiji // Zbornik radova 2. Kongresa Hrvatskog društva radiologa Osijek, Hrvatska, 1998. str. 67-67 (poster, sažetak, znanstveni) Janković, Stipan Hitna radiološka dijagnostika gastrointestinalnog trakta // Hitna stanja u gastroenterologiji / Hozo, Izet ; Miše, Stjepan (ur.). Split: Impresum, 1998. str. 61-70 Janković, Stipan Radijacijska oštećenja // Harrison Principi interne medicine / Ivančević, Željko (ur.). Split: Impresum, 1997. str. 2179-2185 Janković, Stipan; Mihanović, Frane **Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini /** Janković, Stipan ; Mihanović, Frane (ur.). Split: Sveučilište u Splitu, 2015 Janković, Stipan; Marinović Guić, Maja **Osnove radiologije za fizioterapeute** Split: Sveučilište u Splitu, Sveučilišni odjel zdravstvenih studija, 2014 Janković, Stipan; Mihanović, Frane **Uvod u radiologiju** Split: Sveučilište u Splitu, Sveučilišni odjel zdravstvenih studija, 2014 Bešenski, Nada; Janković, Stipan; Buča, Ante **Klinička neuroradiologija mozga** Zagreb: Medicinska naklada, 2011 Mamografski probir raka dojke: Organizacija, rani rezultati i kontrola kvalitete (poslijediplomski tečaj I kategorije stalnog medicinskog usavršavanja), Medicinski fakultet Sveučilišta u Splitu, 2008. Stipan Janković, Damir Miletić

	Dentalna radiografija i radiologija. Split: Medicinski fakultet Split, 2009 (Autorska)

Professional and research papers published in the last five years from the field of the course **(max 5 references)**	(Loughborough University, School of Sport, Exercise and Health Sciences, Loughborough, UK) Novokmet, Natalija; Lela, Ivana; Zajc Petranović, Matea; Havaš Auguštin, Dubravka; Šarac, Jelena; Čoklo, Miran; Karelović, Deni; Žižić, Ana; Škrabić, Veselin, Stanišić, Lada; Orehovec, Biserka et al.
	Nutritional status before pregnancy, blood glucose and maternal body size in pregnancy, and the anthropometry of newborns – preliminary insights from the cribs study // 5th International Conference on Nutrition and GrowthPariz, Francuska, 2018. str.
	Fuchs, Nives; Novokmet, Natalija; Lela, Ivana; Zajc Petranović, Matea; Havaš Auguštin, Dubravka; Šarac, Jelena; Carić, Tonko; Dolanc, Ivan; Karelović, Deni; Škrabić, Veselin et al.
	Impact of pre-pregnancy BMI on blood glucose levels in pregnancy and on the anthropometry of newborns – preliminary insights from the Croatian Islands' Birth Cohort Study (CRIBS) // Collegium antropologicum, 42 (2018), 2; 89-93
	Bukovec, Željka; Mirošević, Gorana
	Endokrinološke i metaboličke bolesti // Medicinska biokemija i laboratorijska medcina u kliničkoj praksi / Topić, Elizabeta ; Primorac, Dragan ; Janković, Stipan ; Štefanović, Mario (ur.). Zagreb: Medicinska naklada, 2018. str. 155-157
	Perinić Lewis, Ana; Zajc Petranović, Matea; Carić, Tonko; Pribačić Ambrožić, Vanda; Karelović, Deni; Janković, Stipan; Missoni, Saša
	A sociodemographic profile of the participants in the Croatian Islands' Birth Cohort Study (CRIBS)/ Sociodemografski profil sudionica u Kohortnoj studiji rođenih na istočnojadranskim otocima (CRIBS) // Hrvatski geografski glasnik, 81 (2019), 1; 83-105 doi:https://.org/10.21861/HGG.2019.81.01.04
	Delale, E.A.; Novokmet, N.; Fuchs, N.; Dolanc, I.; Karelović, D.; Janković, S.; Musić Milanović, S.; Cameron, N.; Missoni, S.
	Some determinants of quality of life of pregnant women // Book of Abstracts of the 33rd Annual Conference of the European Health Psychology Society
	Dubrovnik, Hrvatska, 2019. str. 677-677
	Bočkor, Luka; Delale, Eva Anđela; Carić, Tonko; Novokmet, Natalija; Fuchs, Nives; Karelović, Deni; Janković, Stipan; Musić Milanović, Sanja; Cameron, Noel; Missoni, Saša
	Health locus of control and quality of life of pregnant women. // 3rd Congress of Joint European Neonatal Societies (jENS 2019) Maastricht, Nizozemska, 2019. str. 101-101

Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	Janković, Stipan; Koren, Sonja; Šarić, Matea; Orlandini, Rahela; Antičević, Vesna; Švaljug, Deana; Buljubašić, Ante The Croatian Model of University Education for Nurses // International Archives of Nursing and Health Care, 4 (2018), 2; 4:093, 4 doi:10.23937/2469-5823/1510093 Antičević, Vesna; Ćurković, Ana; Šarić Gudelj, Ana; Janković, Stipan The role of Sociodemographic Characteristics, Types of Internet Activities and Psychological Characteristics in the Internet Addiction // XII congreso internacional y xvii nacional de psicología clínica, Libro de Actas Santander, Španjolska, 2019. str. 605-605 Pavicic Ivelja, Mirela; Ivic, Ivo; Dolic, Kresimir; Mestrovic, Antonio; Perkovic, Nikola; Jankovic, Stipan

	Evaluation of cerebrovascular reactivity in chronic hepatitis C patients using transcranial color Doppler // PLOS ONE, 14 (2019), 6; e0218206, 10 doi:10.1371/journal.pone.0218206 Delale, Eva Anđela; Novokmet, Natalija; Fuchs, Nives; Dolanc, Ivan; Mrdjen-Hodžić, Rafaela; Karelović, Deni; Janković, Stipan; Musić Milanović, Sanja; Cameron, Noel; Missoni, Saša Stress, locus of control, hope and depression as determinants of quality of life of pregnant women: Croatian Islands' Birth Cohort Study (CRIBS) // Health Care for Women International, 42 (2021), 12; 1358-1378 doi:10.1080/07399332.2021.1882464
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	A prospective study of PFAS exposure and cardiovascular disease outcomes in an Island population, Study period: 4/1/2021 to 3/31/2026
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	For over 40 years, since 1972, I have worked continuously as a doctor, and as a teacher from 1978 until today. During that time I have been the editor, co-editor, author and/or co-author of 30 books. I published over 250 scientific and professional articles, several studies, expertise, over 1000 forensic examinations (over 500 were written independently or in an expert team), moving up from the position of the assistant to the tenured full professor in 2004. From 2005 to 2009 I was Dean of the School of Medicine, University of Split for two terms, and from 2011 until today I have been, with a short break, the Head of the UDHS. I was a Deputy Head of the Clinical Institute of Radiology, University Hospital of Split for 12 years, and the Head of the Clinical Institute for over 18 years. I was a member and/or head of several governing councils in Split and the Republic of Croatia and a member of the ASHE team for re-accreditation. I was a member of the National Council for Higher Education and the National Council for Health of the Republic of Croatia. Since 2004 I have been the Head of the Commission for professional conferences and associations, and promotion of science of the Ministry of Science, Education and Sports, Croatia. I received the European diploma in neuroradiology (ECONR) in 2013. I am included in the bok of the most prominent Croatian doctors, and in the millennium edition of Who is Who in the world (Marquis 2000). I was a military volunteer from April 1, 1991 to June 30, 1996. Now I am a member of the Association of Croatian Homeland War volunteer doctors, and a member of the Association of Croatian Homeland War Veterans of the 158. brigade and 6. DP Split and president of the Military Veterans Court of Honour.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	- Split-Dalmatia County award ”for significant personal contribution to the development of health care in our county through the development of diagnostic radiology at University Hospital of Split” in 2001. - Croatian Medical Association Memorial Award (1997) for “participation in the war”, Croatian Medical Association Charter (2003) ”in recognition of outstanding contribution to the Association, medical science and health care in the Republic of Croatia” - in 2008 Diploma Croatian Medical Association.

	- In April 2004 a Certificate of Appreciation ”for the contribution in raising standards of the University Hospital Centre Split” - Certificate of Appreciation of the Croatian Society of Radiology ”for help and support in all areas of activity.” - In 2006 an annual national award for promotion and popularization of science in the Republic of Croatia, - in 2008 the highest award of the Croatian Medical Association Ladislav Rakovac Award ”for achievements in the development of health, medical thought and science, and in particular for the effective work in the Association.” - In 2009 the annual award of the Croatian Anthropological Society, The ”Dragutin Gorjanović Kramberger” for outstanding contribution to the development of science and anthropology in the Republic of Croatia - Diploma of the Croatian Medical Association on the occasion of the 135th anniversary”for outstanding contribution to cherishing honourable tradition of the Croatian Medical Association, medical science and health care in Republic of Croatia” - As the lead author and editor of the best university textbook”- Dental radiography and radiology” the Certificate of Appreciation on the occasion of the School of Medicine Day in 2010 - In 2014 ”as the author of the best university textbook at the School of Medicine in Split in the academic year 2012/2013” (Clinical neuroradiology of the spine and spinal cord) the Certificate of Appreciation and Recognition ”for continuous and rich publishing activity in the field of radiology”. - A military volunteer from April 1, 1991 to June 30, 1996, when demobilized with the rank of reserve major of medical profession. For contribution to the defence of the homeland and patriotic merits in the war I was awarded the Commemorative Medal of the Homeland War 1990 - 1992, Medal for Participation in Operation ”Storm”, Commemorative Medal of the Homeland’s Gratitude, and the Order of the Croatian Trefoil, special Certificate of Appreciation from General Ante Gotovina for contribution in the winning operation ”Storm”, and the Order of Ban Jelačić in March 2013. - In 1985 the ”Medal of Merit”. - In 2021 University of Split award for contribution to the development and promotion of the University of Split.

Title, name and last name	**Assistant professor Iris Jerončić Tomić, MD PhD**
Title of the course at the proposed study programme	Hygiene and Epidemiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	iris.jeroncic@mefst.hr
Year of birth	1966.
Scientist ID	345775
CROSBI profile ID	32487
Research rank and date of the last appointment	Research associate
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor, 1st September 2016
Area and field of appointment into research rank	Public health and health care, Social medicine
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split School of Medicine
Date of employment	May 2009
Job title (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Public health and health care, Social medicine
Position in the institution	Head of the Department of Public Health
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Split School of Medicine
Place	Split
Date	15th July 2014
INFORMATION ON ADDITIONAL TRAINING	
Year	2016
Place	Zagreb
Institution	Faculty of Medicine in Zagreb
Field of training	Palliative care
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Lecturer in Public Health (Social Medicine, Gerontology, Social Media Medicine) at the University of Split School of Medicine
Authorship of university textbooks from the field of the course	1. Mulić, R, Jerončić, I. Komunikacija u javnome zdravstvu // Javno zdravstvo / Puntarić, Dinko; Ropac, Darko ; Jurčev-Savičević, Anamarija (ur.). Zagreb: Medicinska naklada, 2015. str. 518-534
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Jerončić Tomić I, Mulić R. Ageism in the Age of Pandemic, Engleski *// In medias res,* 10(18)#5 2021 (2021), 2347-2364 doi:10.46640/imr.10.18.4 2. Jerončić I, Mudronja L, Mulić R. Current infectiosus risk in international maritime traffic *// 5th IMSC Book of*

	Abstracts / Split: Faculty of Maritime Studies Split, 2013. str. 41-41 3. Mulić R, Jerončić Tomić I. Supplying ships with safe drinking-water *// International maritime health,* 71 (2020), 2; 123-128 doi:10.5603/IMH.2020.0022 4. Mulić R, Russo A, Jerončić Tomić I. Study of Malaria Cases among Seafarers in Croatia and the Causes of Ineffective Chemoprophylaxis among them *// Pedagogika (Sofia),* 93 (2021), 6s; 121-131 5. Jerončić Tomić I, Pranić Sh, Mulić R, Polašek O. Usporedba pojavnosti hiperuricemije i gihta na otoku Korčuli i otoku Visu s gradom Splitom i njegovom okolicom *// Liječnički vjesnik : glasilo Hrvatskoga liječničkog zbora,* Vol.139 (2017), No.5-6; 144-149
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	1. Jerončić-Tomić I, Čerluka T, Vidan P, Mulić R. Stereotypes and health literacy in seafarers: Views of the students of medicine and maritime science on contraception. Int Marit Health. 2018;69(3):163-170. 2. Jerončić I, Mudronja L, Mulić R. Current Infectious Risks in International Maritime Traffic. Book Of Abstracts. 5th International Maritime Science Conference, Split, 2013;41. 3. Jerončić, I Nikolić J Mulić R. Maritime Medicine and Medicine for Seafarers *// Book of Proceedings, 6th IMSC 2014, International Maritime Science Conference* / Fakulteta za pomorstvo in promet, Portorož, 2014. str. 50-50 4. Mulić R, Jerončić Tomić I, Vukić L. What Does A Doctor of Medicine Do at The Faculty of Maritime Studies? *// Book of Proceedings, 8th International Maritime Science Conference* / Kotor, Montenegro: CIP - Nacionalna biblioteka Crne Gore, 2019. str. 459-462 5. **Jerončić Tomić I. Stigma – mitovi i predrasude depresivnog poremećaja – uloga videa kao medija u psihoedukaciji (Boli me – video za promociju mentalnog zdravlja)** In medias res: časopis filozofije medija, Vol. 6 No. 11, 2017.
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. "Internationalization of study programs at all levels at the Faculty of Medicine in Split" 2. "10,001 Dalmatians" of the Medical Faculty of the University of Split 3. Seroepidemiology, hereditary predisposition and infectious diseases in Croatia.
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Regular education and continuous lifelong training. Medical Education Course, University of Split, 2014
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Associate Professor Anamarija Jurčev Savičević, MD**
Title of the course at the proposed study programme	Hygiene and Epidemiology Public Health
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	anamarijajs@gmail.com
Year of birth	1968
Scientist ID	336981
CROSBI profile ID	31630
Research rank and date of the last appointment	Senior Research Fellow July 10, 2019
Research and teaching or teaching rank, and the date of the last appointment	Associate Professor September 19, 2019
Area and field of appointment into research rank	Biomedicine and health Public health and health care Epidemiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	1. Teaching Institute for Public Health of the Split-Dalmatia County 2. University Department of Health Studies, University of Split
Date of employment	1. December 12, 1997 2. April 1, 2021
Job title (professor, researcher, associate teacher, etc.)	1. Epidemiology specialist 2. Associate Professor
Field of research	1. Epidemiology 2. Courses from the Department of Preventive Medicine
Position in the institution	1. Head of the Unit for Scientific Research, Head of the Department for the Control of Tuberculosis and Other Respiratory Infections 2. Head of the Department of Preventive Medicine
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	School of Medicine University of Split
Place	Split
Date	2012
Degree	Specialist in Epidemiology
Institution	PHI
Place	Split
Date	2002
INFORMATION ON ADDITIONAL TRAINING	
Year	2021
Place	Msida, Malta
Institution	Faculty of Education, University of Malta
Field of training	Applied Public Health
Year	2021
Place	Cadiz, Špain
Institution	Faculty of Education, University of Cadiz
Field of training	Applied Public Health
Year	2019

Place	Athens, Greece
Institution	Medical School National and Kapodistrian, University of Athens
Field of training	Epidemiology
Year	2018
Place	Florence, Italy
Institution	School of Human Health Sciencies, Universita degli Studi di Firenze
Field of training	Epidemiology
Year	2014
Place	Izmir, Turkey
Institution	World Health Organization
Field of training	Epidemiology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English Very Good
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian Good
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Travel Medicine- course leader School of Medicine and School of Dental Medicine Undergraduate Numerous undergraduate courses: Medicine of work with health ecology, Hygiene, Epidemiology, Public health, Health promotion, Law in medicine, Infection control and prevention, Dietetics, Medical Humanities, How to live a hundred years, Risk communication
Authorship of university textbooks from the field of the course	Jurčev Savičević A, Miše K. (eds). Tuberkuloza-stara dama u novom ruhu: Zagreb: Medicinska naklada, 2021. Puntarić D, Ropac D, Jurčev Savičević A. (eds.). Javno zdravstvo. Zagreb: Medicinska naklada, 2015.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. **Jurčev Savičević A**, Ninčević J, Veršić Š, Cuschieri S, Bandalović A, Turić A, Bećir B, Modrić T, Sekulić D. Performance of Professional Soccer Players before and after COVID-19 Infection; Observational Study with an Emphasis on Graduated Return to Play. Int J Environ Res Public Health. 2021;18(21):11688. 2. Šunda M Gilić B, Perić I, **Jurčev Savičević A**, Sekulić D. Evidencing the Influence of the COVID-19 Pandemic and Imposed Lockdown Measures on Fitness Status in Adolescents: A Preliminary Report . Healthcare (Basel). 2021;9(6):681. 3. Gilić B, Zenić N, Šeparović V, **Jurčev Savičević A**, Sekulić D. Evidencing the influence of pre-pandemic sports participation and substance misuse on physical activity during the COVID 19 lockdown: a prospective analysis among older adolescents. Int J Occup Med Environ Health. 2021;34:1-13. 4. Andres M, van der Werf MJ, Ködmön C, Albrecht S, Haas W, Fiebig L, Survey study group...**Jurcev Savicevic A**. Molecular and genomic typing for tuberculosis surveillance: A survey

	study in 26 European countries. PLoS One. 2019;14(3):e0210080 5. Obradovic Salcin L, Miljanovic Damjanovic V, **Jurcev Savicevic** A, Ban D, Zenic N. Prospective Analysis of Prevalence, Trajectories of Change, and Correlates of Cannabis Misuse in Older Adolescents from Coastal Touristic Regions in Croatia. Int J Environ Res Public Health. 2019;16(16). pii: E2924
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	/
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. *SEA-EU Alliance.* Impact of COVID-19 illness on professional soccer players (612468-EPP-1-2019-1-ES-EPPKA2-EUR-UNIV) 2. *SEA-EU Alliance.* Impact of COVID-19 pandemic on work content satisfaction, psychophysiological distress and sense of control and cohesiveness among public health workers involved in pandemic control (612468-EPP-1-2019-1-ES-EPPKA2-EUR-UNIV)
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Skills of medical education and scientific work School of Medicine University of Split, 2012.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	University of Split 2021. 4. Congress of Epidemiology with International Participation 2019. Croatian Medical Association 2018.

Title, name and last name	**Asst. Prof. Vanja Kaliterna, M.D., PhD, Clinical Microbiology Specialist**
Title of the course at the proposed study programme	Microbiology and Parasitology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	vanja.kaliterna@gmail.com
Year of birth	15th September 1968
Scientist ID	300762
CROSBI profile ID	23993
Research rank and date of the last appointment	Research Associate, 13th October 2015
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor, 2nd June 2016
Area and field of appointment into research rank	Area Biomedicine and Health Field Clinical medical sciences, Medical Microbiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Teaching Public Health Institute of Split-Dalmatia County
Date of employment	1. 12. 1997.
Job title (professor, researcher, associate teacher, etc.)	Head of Department for Molecular Diagnosis and Diagnosis of Genital Infections
Field of research	Medical Microbiology
Position in the institution	Head of the Department of Clinical Microbiology TPHI SDC
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies, , University of Split
Date of employment	1. 2. 2020.
Job title (professor, researcher, associate teacher, etc.)	Assistant Professor
Field of research	Medical Microbiology
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Science (PhD)
Institution	School of medicine, University of Split
Place	Split
Date	24. 3. 2014.
INFORMATION ON ADDITIONAL TRAINING	
Year	1998.
Place	Farmington, Connecticut, USA
Institution	University of Connecticut Health Center
Field of training	Molecular biology (University Postdoctoral Fellow in the Department of Pediatrics)
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	english (4-5)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	german (3)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	italian (3)
COMPETENCES FOR THE COURSE	

Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Course teacher: Microbiology and Parasitology and Clinical Microbiology
Authorship of university textbooks from the field of the course	1. **Kaliterna V**. Bakterijska vaginoza. U: Zekan J, Šitum M, Karelović D, Marinović B, ur. Vulvologija. Zagreb: Medicinska naklada, 2020., str. 51-4. 2. **Kaliterna V**. Ortomiksovirusi (virusi Influence). U: Brooks GF, Carroll KC, Butel JS, Morse SA, Mietzner TA, ur. "Medicinska mikrobiologija (Jawetz, Melnick i Adelberg)", Placebo d.o.o., 2015. (Medical Microbiology. 26th ed. New York: McGraw-Hill; 2013.) 3. **Kaliterna V**. Bunyaviridae. U: Uzunović-Kamberović S, ur. Medicinska mikrobiologija. Zenica: Štamparija Fojnica, 2009. str. 851-5.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Vilibic-Cavlek T, Stevanovic V, Ilic M, Barbic L, Capak K, Tabain I, Krleza JL, Ferenc T, Hruskar Z, Topic RZ, **Kaliterna V**, Antolovic-Pozgain A, Kucinar J, Koscak I, Mayer D, Sviben M, Antolasic L, Milasincic L, Bucic L, Ferencak I, Kaic B. SARS-CoV-2 Seroprevalence and Neutralizing Antibody Response after the First and Second COVID-19 Pandemic Wave in Croatia, Pathogens. 2021 Jun 20;10(6):774. 2. **Kaliterna V**, Barišić Z. Genital human papillomavirus infections. Front Biosci (Landmark Ed). 2018;1;23:1587-611. 3. Tonkić M, Sušić E, Goić-Barišić I, **Kaliterna V**, Tambić Andrašević A. Bakteriološka dijagnostiku infekcija mokraćnog i spolnog sustava: smjernice za mikrobiološku dijagnostiku Hrvatskog društva za kliničku mikrobiologiju Hrvatskog liječničkog zbora.Zagreb: Hrvatsko društvo za kliničku mikrobiologiju; 2017. 4. **Kaliterna V**, Kaliterna M, Hrenović J, Barišić Z, Tonkić M, Goic-Barisic I. *Acinetobacter baumannii* in the Southern Croatia: clonal lineages, biofilm formation and resistance patterns. Infectious Diseases (Lond) 2015;47(12):902-7. 5. Šimundža R, **Kaliterna V**, Mladinić Vulić D, Pejković S. The prevalence of *Ureaplasma urealyticum* bacterium in endocervical swabs in the Split-Dalmatia county. Gynaecol Perinatolog 2015;24(2):56-8.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	- Course „Skills of medical education and scientific work“, University of Split School of Medicine, 2016. - Course „Basic Communication Skills Course ”, University Department of Health Studies, University of Split, 2021.

Title, name and last name of the course leader	**Assistant professor Ph.D. Zlatka Knezović, B.Sc**
Title of the course at the proposed study programme	Hygiene and Epidemiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	zlatka.knezovic@nzjz-split.hr
Year of birth	1962.
Scientist ID	353820
CROSBI profile ID	33313
Research rank and date of the last appointment	research associate, 01.07.2020.
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor, 24.11.2020.
Area and field of appointment into research rank	Biomedicine and Health, Basic Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Teaching Institute for Public Health of Split-Dalmatia County
Date of employment	16.07.1987.
Job title (professor, researcher, associate teacher, etc.)	Head of the Department of Chemical Analysis of Food and General Use Items
Field of research	Health ecology
Position in the institution	Deputy Head of the Health Ecology Service
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies
Date of employment	24.11.2020.
Job title (professor, researcher, associate teacher, etc.)	Assistant Professor
Field of research	Medical Laboratory Diagnostics
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Science (PhD)
Institution	Faculty of Chemical Technology, University of Split
Place	Split
Date	25.04.2016.
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (4)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian (2)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Leader of the course Food Toxicology

Authorship of university textbooks from the field of the course	Sutlović, Davorka; Marušić, Jadranka; Stipišić, Angela; Poljak, Vedran; Laštre Primorac, Danja; Majić, Zrinka; Luetić, Sanja; Knezović, Zlatka; Papić, Jasminka; Žafran Novak, Jelena et al. Food toxicology / Sutlović, Davorka (ed.) Split: Redak, 2011. Sutlović, Davorka; Kovačić, Zdravko; Riha, Biserka; Žuntar, Irena; Tomašek, Ljubica; Bakulić, Lana; Nestić, Marina; Horvat, Vesna; Mandić, Sanja; Plavšić, Franjo et al. Fundamentals of forensic toxicology / Sutlović, Davorka (ed.) Split: Redak, 2011
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	Nedoklan, Srđan; Knezović, Zlatka; Knezović, Nina; Sutlović, Davorka. Nutrition and mineral content in human teeth through the centuries // Archives of oral biology, 124 (2021) doi:.org/10.1016/j.archoralbio.2021.105075 Nedoklan, Srđan; Tadin, Antonija; Knezović, Zlatka; Sutlović, Davorka. Comparison of dental caries in Croats from the early medieval period and the 20th century *// Archives of oral biology,* 109 (2020), 104581, 7. doi:.org/10.1016/j.archoralbio.2019.10458 Knezović, Zlatka; Trgo, Marina; Sutlović, Davorka Monitoring mercury environment pollution through bioaccumulation in meconium // Process safety and environmental protection, 101 (2016), 2-8 doi:10.1016/j.psep.2016.01.013 Sutlović, Davorka; Borić, Igor; Slišković, Livia; Popović, Marijana; Knezović, Zlatka; Nikolić, Ivana; Vučinović, Ana Bone mineral density of skeletal remains: Discordant results between chemical analysis and DXA method *// Legal medicine,* 20 (2016), 18-22 doi:10.1016/j.legalmed.2016.03.008 Knezović, Zlatka; Trgo, Marina; Sutlović, Davorka Assessment of environmental pollution through accumulation of lead and cadmium in meconium samples // Fresenius environmental bulletin, 25 (2016), 12A; 5804-5811
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Course "Skills of medical education and scientific work", Faculty of Medicine in Split November 14 - 16, 2019
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Višnja Kokić Maleš, MD, PhD, Assistant Professor**
Title of the course at the proposed study programme	Internal Medicine
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	kokicvisnja@gmail.com
Year of birth	1984
Scientist ID	
CROSBI profile ID	40059
Research rank and date of the last appointment	research associate, July 2019
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor, June 2020
Area and field of appointment into research rank	scientific field of biomedicine and health, field of clinical medical science, branch of internal medicine
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	CHC Split, University of Split, University Department of Health Studies
Date of employment	CHC January 2012, Universiti 4/2021
Job title (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Clinical Medicine sciences
Position in the institution	Leading the course of Internal Medicine at University of Split, University Department of Health Studies Position at CHC: diabetologist and endocrinologist
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Science, PhD
Institution	Split Medical School
Place	Split
Date	April 2018
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Vilovic M, Kurir TT, Novak A, Krnic M, Borovac JA, Lizatovic IK, Kokic V, Bozic J. Hypoglycemia and Glucagon Utilization in Insulin-Treated Diabetic Patients. Exp Clin Endocrinol Diabetes. 2020

	Aug;128(8):493-498. doi: 10.1055/a-0741-6763. Epub 2018 Nov 14. PMID: 30428496. 2. **Kokic V**, Kokic S, Krnic M, Petric M, Liberati AM, Simac P, Milenkovic T, Capkun V, Rahelic D, Blaslov K. Prediabetes awareness among Southeastern European physicians. J Diabetes Investig. 2017 Aug 29;9(3):544–8. doi: 10.1111/jdi.12740. Epub ahead of print. PMID: 28853223; PMCID: PMC5934258. 3. **Kokic V**, Martinovic Kaliterna D, Radic M, Perkovic D, Cvek M, Capkun V. Relationship between vitamin D, IFN-γ, and E2 levels in systemic lupus erythematosus. Lupus. 2016 Mar;25(3):282-8. doi: 0.1177/0961203315605367. Epub 2015 Sep 24. PMID: 26405019. 4. **Kokic V,** Martinovic Kaliterna D, Radic M, Tandara L, Perkovic D. Association between vitamin D, oestradiol and interferon-gamma in female patients with inactive systemic lupus erythematosus: A cross-sectional study. J Int Med Res. 2018 Mar;46(3):1162-1171. doi: 10.1177/0300060517734686. Epub 2017 Dec 13. PMID: 29235391; PMCID: PMC5972245 5. Domagoj Markovic, Josip Lukenda, **Visnja Kokic,** Petra Simac, Piero Marin Zivkovic, Ingrid Prkacin, Viktor Culic. A ten-year comparative study of cardiovascular disease publications, health and socioeconomic indicators between European countries. Signa Vitae. 2021. 17(3);95-102.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Senior lecturer, Sonja Koren**
Title of the course at the proposed study programme	English for Radiologic Technology I, II
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	sonja.koren@ozs.unist.hr
Year of birth	1963
Scientist ID	
CROSBI profile ID	CROSBI ID: **1036027**
Research rank and date of the last appointment	Senior lecturer 2022
Research and teaching or teaching rank, and the date of the last appointment	
Area and field of appointment into research rank	Area: humanities, field: philology, branch: English
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies
Date of employment	May, 2nd, 2013
Job title (professor, researcher, associate teacher, etc.)	Lecturer
Field of research	Humanities
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	MA in English language and literature and French language and literature
Institution	Faculty of Humanities and Social Sciences
Place	Zagreb
Date	1989
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	1. International Scientific and Professional Conference - Contemporary Issues in Economy and Technology - CIET 2014, 19-21 June 2014, University Department of Professional Studies, Split, Croatia (Međunarodna znanstvena i stručna konferencija Contemporary Issues in Economy and Technology - CIET 2014, 19. - 21. lipnja 2014., Sveučilišni odjel za stručne studije, Split, Hrvatska) 2. Grammar Learning Strategies, prof.dr.sc. Miroslaw Pawlak, u organizaciji Zavoda za jezike, Sveučilišni odjel za stručne studije, Split, 7. studenog 2014. 3. Teaching Grammar - A Practical Perspective, dr.sc. Anna Mystkowska-Wiertelak, u organizaciji Zavoda za jezike, Sveučilišni odjel za stručne studije, Split, 7. studenog 2014. 4. Developing English Language Portfolios, Peter Cuypers, MA, predavanje i radionica u organizaciji Ureda za mobilnost i međunarodnu suradnju, 8. svibnja 2015. 5. CLIL (Content and Language Integrated Learning) in Portuguese Higher Education - an ongoing project, dr.sc. Ana Gonçalves, predavanje i radionica u organizaciji Ureda za mobilnost i međunarodnu suradnju, 8. svibnja 2015. 6. Erasmus+, Introduction to Teaching English for Medical Purposes, 31. kolovoza 2015. – 4. rujna 2015., Ulm, Njemačka

	7. Workshop „Izrada i pretraživanje maloga specijaliziranoga jezičnoga korpusa“ u organizaciji Udruge nastavnika jezika struke na visokoškolskim ustanovama, 16. veljače 2017. 8. Webinar „Corpus-based Discourse Analysis“, Corpus Research Centre, Air University, 26. studenog, 2021. 9. IATEFL English for Specific Purposes Special Interest Group online event: ESPSIG: Analysis of learners' needs in the teacjing of English for medical purposes, 30. studenog, 2021.
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	French 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian 3
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	English language for students of physiotherapy, nursing, midwifery, radiologic technology, and medical laboratory diagnostics
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Koren S. (2016). Conceptual Metaphors in Discourse on Organ Donation, Journal of Foreign Language Teaching and Applied Linguistics, Volume 3. – Number 3 – 2016, 163-171. ISSN: 2303-5528 2. Duplančić Rogošić G. i Koren S. (2017). Exploring collocational competence of first-year university students as non-native speakers of English“. Conference Proceedings II International Conference From Theory to Practice in Language for Specific Purposes, 23-37. ISSN:1849-9279 3. Koren S. i Rogulj J. (2017). Kolokacijska kompetencija neizvornih korisnika engleskog jezika medicinske struke. Zbornik radova Veleučilišta u Šibeniku, 3-4/2017, 19-31. UDK 811.111:61 (izvorni znanstveni članak) ISSN 1846-6699 4. Janković S., Koren S., Šarić M., Orlandini R., Antičević V., Švaljug D. i Ante Buljubašić A. (2018). The Croatian Model of University Education for Nurses. International Archives of Nursing and Health Care. ISSN: 2469-5823
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	1. Rogulj J. i Koren S. (2018). Od strukturalizma do suvremenog „kuks” (komunikacijsko-učenje/usvajanje-kontrastivno-spoznajno) pristupa u nastavi engleskoga jezika. Zbornik radova Veleučilišta u Šibeniku, 3-4/2018,143-159. UDK 371.3:811.111 (pregledni rad) ISSN 1846-6699 2. Rogulj J. i Koren S. (2017). Analiza slučaja: Disleksija i disgrafija u nastavi engleskoga jezika. Vaspitanje i obrazovanje, XLII, 3-4, 247-267, UDK 371.3:811.111):616.89-008.434.5 (pregledni istraživački rad) 3. Duplančić Rogošić G. i Koren S. (2018). Researching Plagiarism in Higher Education – Case of First-Year Students at

	Selected HEIs. Conference Proceedings Contemporary Issues in Economy & Technology 2018.
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	UNIOS ZUP-2018-77, Figurative language in Health Communication
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Graduated from the Faculty of Humanities and Social Sciences, teacher education
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and surname	**Associate professor Željko Kovačević**
The coursehe teaches in the proposed study program	Physcial training I and II
GENERAL INFORMATION ABOUT THE HOLDER	
E-mail address	zkovacev@oozs.unist.hr
Year of birth	1963.
Registration number from the register of scientists	378662
The number of the person"s crosby profile	CROSBI ID: 959
Scientific or artistic title and date of last selection	
Scientific-teaching, artistic-teaching or teaching title and date of last selection	Associate professor, 2022
Area and field of choice for a scientific or artistic title	Kinesiology
Data on current employment	
Constitution of employment	University Department of Health Studies
Date of employment	May 5, 2011.
Job title (professor, researcher, associate, etc.)	professor
Work area	
Function	Lecturer
EDUCATION DATA- Highest degree archieved	
Title	Doctor of kineziology, PhD
Institution	Faculty of Physical Education
Place	Banja Luka, Bosnia and Herzegovina
Date	
TRAINING DATA	
Year	
Place	
Institution	
Area of training	
NATIVE AND FOREIGN LANGUAGES	
Native languages	Croatian
Foreign language and language skills on scale from 2 (sufficient) to 5 (excellent)	English, 3
SUBJECT COMPETENCIES	
Previous experience in conducting similar courses (state the nameo f the course, the study program in which it is performed – performed and the level of the study program	Physical education and sports, Faculty of Medicine in Split
Authorship of university – faculty textbooks in the field of subjects	
Professional, scientific and artistic works published in the last fiv years in the field of the subject (maximum 5 references)	1.Diferences in psvchological charactereistics betwen diferent active female students Internaciona lScientific Journal of Kineziologiy June 2015. god. Kovačević.Ž., Štefan.,L, Sporiš.,G.,Čular.,D. Šamija.K 2.Metric Characteristics Of Tests Assessing Speed and Agiliti in Youth Soccer Players., Sport Mont 2018.god. Kovačević.,Ž. Žuvela.,Kuvačić.,G.

	3.Differences in the specific fitness abilities of younger football players, Faculty of Kinesiology,Zagreb 2020.god. Kovačević.,Ž, Duje Poljak., Čavala Marijana;,Nenad Rogulj. 4. Recreational kinesiological enegagement and self- respect in students of diferent ages. Opatija 2021. Jelić.,Kovačević.,Ž. Rogulj.,N. Čavala.,M. Đuzel.,J.
Professional and scientific papers on methodology and quality of teaching published in the last five years (maximum 5 references)	
Professional, scientific and artistic projects in the field of subjects that have been implemented in the last five years (maxiumum 5 references)**)**	
Within which program and to what extent did the holder acquire methodological-psychological-didactic-pedagogical competencies?	
RECOGNITIONS AND AWARDS	
Recognitions and awards for teaching and research work-artistic work	University of Split, University Department of Health Studies.Acknowledgments for the overall work of the Department over the past ten years, especially for the results achieved by students and the development of the universty sports at the Universty Department

Title, name and last name	**Asocc. Prof. dr. sc. Slavica Kozina, psychologist**
Title of the course at the proposed study programme	Health Care Psychology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	slavica.kozina@mefst.hr
Year of birth	1966.
Scientist ID	MB: 276745
CROSBI profile ID	26344
Research rank and date of the last appointment	Senior Research Associate, 01. 07. 2020.
Research and teaching or teaching rank, and the date of the last appointment	Asocciate professor, 23. 07. 2020.
Area and field of appointment into research rank	Biomedicine and healthcare, public health and health care, public health
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	School of Medicine, University of Split
Date of employment	1998.
Job title (professor, researcher, associate teacher, etc.)	Professor
Field of research	Medical psychology, psychological trauma
Position in the institution	Professor
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Ph. D.
Institution	School of Medicine, University of Zagreb
Place	Zagreb
Date	2011.
INFORMATION ON ADDITIONAL TRAINING	
Year	2002/2003
Place	Oslo, Norwey
Institution	Department of Psychiatry. Psychosocial Centre for Refugee. Medical School University of Oslo.
Field of training	War trauma
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English language (C+, ¾)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German language (3)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Undergraduate studies in nursing and physical therapy: Communication skills; Health psychology; Developmental Psychology.
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	Urlić I, Jurčević S. *Psychological aspects of diving medicine* (in Croat) Psihološki aspekti medicine ronjenja. U: Petri NM, Andrić D. Odabrana poglavlja iz medicine ronjenja: materijali za pohađanje

	tečaja poslijediplomskog usavršavanja iz medicine ronjenja za liječnike. Split: Hrvatski liječnički zbor, Hrvatsko društvo za podvodnu i hiperbaričku medicinu, Institut pomorske medicine HRM, Medicinski fakultet Sveučilišta u Splitu, 2001:70-75. Jurčević S. *Psychology of pain*. (In Croat) Psihologija boli. U: Jukić M, Sapunar D. Kronična bol-dijagnostički postupak i liječenje. Poslijediplomski tečaj stalnog usavršavanja liječnika (Tečaj I kategorije). Split: Medicinski fakultet u Splitu, 2006:68-71. Jurčević S. *Psychological components of pain.* (In Croat) Psihološke odrednice boli. U: Jukić M. Liječenje kronične boli. Poslijediplomski tečaj stalnog usavršavanja liječnika (Tečaj I kategorije). Split: Ambulanta za liječenje boli. Odjel za anesteziju i intenzivno liječenje KBC Split, Hrvatsko društvo za liječenje boli - Hrvatski liječnički zbor, Hrvatska liječnička komora, 2008:68-71.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Kozina S, Kowalski M, Vlastelica M, Mastelic T, Borovac JA. Traumatic memory of one's son gone missing in war: content analysis using Krippendorff's alpha. SAGE Open (January-March) 2019:1-9. Doi: 10.1177/2158244019839627 2. Kozina S, Vlastelica M, Borovac JA, Mastelić T, Marković D, Lončar M. Violence without a face: The Analysis of Testimonies of Women who were seually assaulted during the war in Croatia and Bosnia and Herzegovina. Psychiatria Danubina, 2018;Vol , (accepted 22.11.2018) 3. Lončar, M; Dijanić Plašć, I; Bunjevac, T; Hrabač, P; Jakšić, N; Kozina, S; Henigsberg, N; Šegud, M; Marčinko, D. Predicting Symptom Clusters of posttraumatic Stress Disorder (PTSD) in Croatian War Veterans: The Role of Socio-demohraphis, War Experiences and Subjective Quality of Life. Psychiatria Danubina 2014;26:231-238. 4. Jukic M, Kvolik S, Kardum G, Kozina S, Tomic Juraga A. Knowlwdge and Practices of Obtaining Informed Consent or Medical Procedures among Specialist Physicians: Questionnaire Study in 6 Croatian Hospitals. Croat Med J 2009;50:567-74 5. Jurcevic S, Allen J, Dahl S. Gender Differences in War-Related Disappearance: Croatian Experiences. Military Medicine 2007;172(4):370-375.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	1. Jurcevic Kozina S, Malicki M. Professional achievements in medicine: Too many unresolved questions. Acta Medica Academica 2012;41(1):8-25 2. 3. Jukic M, Kozina S, Kardum G, Hogg R, Kvolik S. Physicians overstimate parient knowledge of the process of informed consent. A cross-sectional study. Med Glas Ljek komore Zenicko-doboj kantona 2011;8(1):39-45

	4. Vilovic K, Jurcevic S, Ivanisevic R, Sapunar D. Clinical skills teaching – Survey at medical school in Split and Zagreb. Medicina 2006;42:26-30. 5. Vlastelica M, Jurčević S. Specifičnosti žalovanja majki čiji su sinovi nestali i/ili su posmrtno identificirani. Soc.psihijat 2008;36:29-32. 6. Kozina, S; Vlastelica M. Disocijacija i detachment kao odraz traumatskog događaja na aspekte sebstva. Soc. psihijat. 2014; 42:33 – 42.
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	Impact of the scientific journals on the Croatian medical community" (principal investigator Prof. Dr. Sc. Matko Marušić) Project Code: 216-1080314-0245 Project duration: 2016
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	1. Completed graduate study of psychology (professor of psychology), subjects: Pedagogical Psychology, Developmental Psychology 1 and 2, Didactics and Pedagogy 2. Completed postgraduate professional studies in “Psychotherapy”
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Croatian Psychological Society Award "Ramiro Bujas”

Title, name and last name	**Dejan Kružić, PhD, Full professor tenure**
Title of the course at the proposed study programme	Basics of Management in Health Care
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	dkruzic@efst.hr
Year of birth	1954.
Scientist ID	92243
CROSBI profile ID	20710
Research rank and date of the last appointment	Scientific advisor - tenure
Research and teaching or teaching rank, and the date of the last appointment	Full professor tenure, 24.5.2018.
Area and field of appointment into research rank	Social sciences, Field of Economy, branch Economics of Entrepreneurship
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Faculty of Economics, Business and Tourism Split
Date of employment	01.03.2003.
Job title (professor, researcher, associate teacher, etc.)	Professor at the Department of management
Field of research	Crisis management, Entrepreneurship
Position in the institution	Full professor tenure
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	Faculty of Economics, Business and Tourism Split
Place	Split
Date	1983.
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (3)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian (2)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Crisis management; Entrepreneurship; Family business; Entrepreneurial planning; Public-private partnership projects; Postgraduate and graduate university studies; Undergraduate university and professional study
Authorship of university textbooks from the field of the course	Kružić, D. (ur.), *Obiteljsko poduzetništvo*, Ekonomski fakultet Mostar i Ekonomski fakultet Split, 2016. Buble, M., Kružić, D.: *Poduzetništvo – realnost sadašnjosti i izazov budućnosti*, RRiF, Zagreb, 2006.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	Kružić, D., Ivić, M., Cindrić, I.*: Corporate Social Responsibility as a Reputation Mechanism for the Companies Operating in Media Industry*, Proceedings of the 7th International OFEL Conference on

	Governance, Management and Entrepreneurship: Embracing Diversity in Organisations, Zagreb, 2019. Škokić, V., Kružić, D., *Knowledge creation and the need for new research directions in entrepreneurship studies*, Management Education and Research in the Upcoming Epoch: Rethinking Discipline and Reconceptualization Modes of Creating Knowledge (Tipurić, D., Aleksić, A., ur.). Ekonomski fakultet Zagreb, Zagreb, 2017. Bulog, I., Jukić, I., Kružić, D., *Managerial Skills: Does Family Ownership Make a Difference*? Proceedings of the 5th International OFEL Conference on Governance, Management and Entrepreneurship: The Paradoxes of Leadership and Governance in the Postmodern Societx, Tipurić, D., Galetić, F. (ur.), CIRU, Zagreb, 2017. Kružić, D. (ur.), *Obiteljsko poduzetništvo*, Ekonomski fakultet Mostar i Ekonomski fakultet Split, 2016.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Medal of the City of Split (2003) for outstanding contribution to local development management and for an overall scientific and professional activities. Award of the Faculty of Economics in Split for the book *Family Business* (2004). Recognition of the Faculty of Economics in Split for valuable scientific work - for co-authorship of the book *Influence of organizational variables on the success of business process improvement programs* (2010). Recognition of the Faculty of Economics in Split for valuable scientific work - the book *Family Businesses - Life Cycles, Inheritance and Sustainability* (2012). Recognition of the Faculty of Economics in Split for valuable scientific work - for co-authorship of the book *Possibilities of Restructuring Aluminij d.d. Mostar* (2013). Award of the Faculty of Economics in Split for valuable scientific work - for co-authorship of the book *Family Entrepreneurship* (2015).

Title, name and last name	**Assistant Professor, Sendi Kuret, PhD**
Title of the course at the proposed study programme	Biology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	sendikuret@ozs.unist.hr
Year of birth	1971.
Scientist ID	279142
CROSBI profile ID	22887
Research rank and date of the last appointment	
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor,2020
Area and field of appointment into research rank	Biomedicine and health, field of basic medical science, genetics
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University Department of Health Studies
Date of employment	April 20,2021
Job title (professor, researcher, associate teacher, etc.)	Assistant Professor
Field of research	Medical-laboratory diagnostics
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of Science (PhD)
Institution	Faculty of Science, University of Zagreb
Place	Zagreb
Date	2011.
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English – (4)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Sutlović D, Kuret S, Definis M. New psychoactive and classic substances in pooled urine samples collected at the Ultra Europe festival in Split, Croatia. Arhiv za higijenu rada i toksikologiju 2021, 72 (3): 198-204. 2. Sutlović D, Ključević Ž, Kuret S. ABCB1, CYP2B6, and CYP3A4 genetic polymorphisms do not affect methadone maintenance treatment in HCV-positive patients. Arh Hig Rada Toksikol. 2020, 71 (4): 353-358. 3. Bezić J, Kuret S, Vrbičić B, Smolić J, Borić I, Škifić I, Ledina D, Božić J. Clinicopathological Characteristics of BRAF V600E Mutated

	Melanomas in the Dalmatian Region of Croatia. Acta Dermatovenerol Croat. 2019, 27(4):225-230. 4. Piljić Burazer M, Mladinov S, Matana A, Kuret S, Bezić J, Glavina Durdov M. Low ERCC1 expression is a good predictive marker in lung adenocarcinoma patients receiving chemotherapy based on rend sin n all TNM stages – a single-center study. Diagnostic Pathology 2019; 14;14(1):105 5. Vince A, Židovec Lepej S, Bingulac-Popović J, Miletić M, Kuret S, Sardelić S, Baća Vrakela I, Kurelac I. Distribution of hepatitis C virus genotypes and subtypes in Croatia: 2008-2015. Central European Journal of Public Health 2018; 26(3): 159-63.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. Project collaborator - "Effect of cannabinoids on inflammatory markers and blood pressure in elderly healthy subjects" , external source of funding, principal investigator full professor Željko Dujić, Faculty of Medicine, University of Split 2. Project collaborator of the scientific research project of the Government of the Republic of Croatia "Monitoring of intoxication with new psychoactive substances by analysis of urine samples" (2018) Leader prof.dr.sc. Davorka Sutlović
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name	**Assistant professor Mihajlo Lojpur, MD, PhD**
Title of the course at the proposed study programme	Emergencies in Medicine
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	mihajlo.lojpur@gmail.com
Year of birth	1958.
Scientist ID	345900
CROSBI profile ID	32509
Research rank and date of the last appointment	/
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor, July 1, 2014
Area and field of appointment into research rank	Biomedicine and Health, Clinical Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	School of medicine, University of Split / University hospital Split Department of anesthesiology and intensive care
Date of employment	In University hospital Split from February 13, 1992.
Job title (professor, researcher, associate teacher, etc.)	Spec. anesthesiologist, subspecialist in intensive care medicine / research associate
Field of research	Anesthesiology, resuscitation and intensive care
Position in the institution	Head of the Department of Anesthesiology, Clinic of Anesthesiology, Resuscitation and Intensive Care / lecturer
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	M.D., Ph.D.
Institution	School of medicine, University of Split
Place	Split
Date	Postgraduate doctoral study completed on April 5, 2013
INFORMATION ON ADDITIONAL TRAINING	
Year	2000., 2003.-2007., 2008.
Place	Rijeka, Zagreb, Rome
Institution	University clinical Rijeka, Clinical hospital zagreb
Field of training	Cardioanesthesia and intensive care of cardiac surgery patients. Echocardiography (EACTA Echo'08).
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German, 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	• Resuscitation and emergency medicine courses of the Croatian Medical Association since 1996. and the European Resuscitation Council (ERC) since 2002. • Co-organizer and lecturer in the Postgraduate Courses in Anesthesiology, Resuscitation and Intensive Care under the auspices of the Council of the European Community and the aegis of the Foundation for European Education in Anesthesiology (FEEA), from 2002. to 2010. • Co-organizer and lecturer in Fundamental Critical Care Support Course Society of Critical Care Medicine, Split, Croatia, 2004. – 2009.

	• Lecturer at the courses of Croatian Society of Anesthesiology, Reanimatology and Intensive Care Medicine of the Croatian Medical Association and the Committee for European Education in Anesthesiology (CEEA) from 2018 • Head of the Department of First Aid, at the Faculty of Medicine in Split, from 2007 to 2010. (graduate study)
Authorship of university textbooks from the field of the course	1. Coautor of Basic Clinical skills. In: Simunovic VJ: Catalogue of Clinical Skills. Seattle: CreateSpace Independent Publishing Platform; 2013. ISBN - 10: 1489580212. 2. Autor of BLS. In: Simunović VJ: Basic and General Clinical Skills. Seattle: CreateSpace Independent Publishing Platform; 2013. ISBN - 10: 1489556648 3. Autor of ALS. In: Simunović VJ: Basic and General Clinical Skills. Seattle: CreateSpace Independent Publishing Platform; 2013. ISBN - 10: 1489556648 4. Autor of chapeter Resuscitation In: Šimurina, T, Mraović, B. General clinical anesthesiology and resuscitation. Zadar, Department of Health Studies, University of Zadar, 2020
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	• Anic, Ante; Breskovic, Toni; Jurisic, Zrinka; Borovina, Ante Lojpur, Mihajlo Kocen, Dubravka; Nenadic, Denis; Bulat, Cristian; Vukovic, Ivica; Duplancic, Darko. Percutaneous epicardial approach for ablation of ventricular tachycardia in patients with structural heart disease - a review of a series of patients from the Clinical Hospital Center Split. Cardiologia Croatica. 13 (2018), 11-12; 318-318 doi: 10.15836 / ccar2018.318
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	• Medical School Split, Integrated Learning in Medicine, (Intel-M „Train the Trainee Seminar“), Split, Croatia, 2007. • Medical school Split, Skills of medical education and research, Medical School Split, Split, Croatia, 2012.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	1. Acknowledgement of the Croatian Medical Association for improving medical profession, improving health and humanitarian activity (2008.) 2. Diploma of the Croatian Medical Association for significant contribution in professional, scientific, and ethic principles and improvement of national health (2014.) 3. Muniment of the Croatian Chamber of Dental Medicine (HKDM) for special contribution to the development and improvement of dental activity in the Republic of Croatia, significant merits and assistance to the Chamber in accomplishing its tasks (2016) 4. Muniment of the Croatian Medical Association for a special contribution to the development and improvement of healthcare and healthcare activities in the Republic of Croatia, for the contribution of medical science and significant merit and assistance to the Croatian Medical Association in the accomplishment of its tasks (2017.)

	5. Ladislav Rakovac Award of the Croatian Medical Association Assembly for the achieved results in the development of medicine, medical thought and science and especially for effective work in the Choir (2019)

Title, name and last name of the course leader	**Assist.prof. Sanja Lovric Kojundzic, MD,PhD**
Title of the course at the proposed study programme	Radiological Vocabulary and Standards Radiological Methods in Special Working Fields Multiplanar Reconstruction Images of Body Structures
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	lovric.sanja@gmail.com
Personal web page	
Year of birth	1974
Scientist ID	276580
CROSBI profile ID	22950
Research rank and date of the last appointment	PhD 06.11.2009.
Research and teaching or teaching rank, and the date of the last appointment	Assist.prof 21.07.2016.
Area and field of appointment into research rank	Biomedicine and Health; Clinical Medical Sciences; Branch - Radiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Clinical Hospital Split /University of Split, School of Medicine
Date of employment	15.09.2008. / 01.03.2018.
Job title (professor, researcher, associate teacher, etc.)	Assist.prof radiology specialist, subspecialist in neuroradiology
Field of research	Medical Radiology
Position in the institution	Head of the Department of Medical Radiology radiology specialist, subspecialist in neuroradiology
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Subspecialist in neuroradiology / Assist.prof.
Institution	Clinical Hospital Split /University of Split, School of Medicine
Place	Split
Date	2015/2017
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Head of the Department of Medical Radiology Lecturer at the Department of Medical Radiology (Croatian and English Studies), University of Split, School of Medicine Lecturer at the postgraduate university study "Biology of neoplasms". Lecturer in several postgraduate courses of the I category. Leader of 3 courses at Health studies - Radiological technology (Radiological vocabulary and norms, Multiplanar presentation of body structure, X-ray methods in special working conditions)
Authorship of university textbooks from the field of the course	1. Histological atlas: http://www.vms.hr/HistologyAtlas/index.htm 2. Clinical neuroradiology of the brain (Chapter II: Hereditary brain disorders)

	3. Clinical neuroradiology of the spine and spinal cord (Chapter VII,Degenerative diseases of the spine) 4. Basics of radiology for midwives, University of Split, University Department of Health Studies
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Lovrić Kojundžić S, Budimir Mršić D, Jelovina I, Benzon B, Tomasović M. The applicability of magnetic resonance imaging classification system (MRICS) for cerebral palsy and its association with perinatal factors and related disabilities in a Croatian population-based sample. Croat Med J. 2021 Aug 31;62(4):367-375. PMID: 34472740. 2. Marcic Lj, Marcic M, Lovric Kojundzic S, Marcic B, Capkun V, Vukojevic K. Personalized Approach to Patient with MRI Brain Changes after SARS-CoV-2 Infection. Journal of personalized medicine vol. 11,6 442. 21 May. 2021, doi:10.3390/jpm11060442 3. Stula I, Kojundzic SL, Guic MM, Novak K. Carotid artery stenosis in correlation with neck and carotid artery anatomy. Vascular. 2021 May 30:17085381211018603. doi: 10.1177/17085381211018603. Epub ahead of print. PMID: 34053369. 4. Sunara D, Krnić Martinić M, Lovrić Kojundžić S, Marčić L. Vestibular neuronitis in a vestibular schwannoma patient. Auris Nasus Larynx. 2021 Apr 25:S0385-8146(21)00126-7. doi: 10.1016/j.anl.2021.04.003. Epub ahead of print. PMID: 33910770 5. Šošo D, Aljinović J, Lovric Kojundzic S, Marinović I, Čečuk Jeličić E, Marasović Krstulović D. Ultrasound-Verified Peripheral Arthritis in Patients with *HLA-B*35* Positive Spondyloarthritis. Life (Basel) 2021 Jun; 11(6): 524. Published online 2021 Jun 4. doi: 10.3390/life1106052
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name of the course leader	Frane Mihanović, PhD, Assistant professor
Title of the course at the proposed study programme	Computers in Radiology, New Technologies in Radiology, Forensic radiography, Applied radiography in other areas, Clinical Skills I, II, III
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	frane.mihanovic@ozs.unist.hr
Personal web page	/
Year of birth	1962
Scientist ID	354821
CROSBI profile ID	33405
Research rank and date of the last appointment	Research Associate, 2017.
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor, 2017.
Area and field of appointment into research rank	Biomedicine and Health, Anatomy
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split, University Department of Health Studies
Date of employment	10. 2011.
Job title (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Radiological technology
Position in the institution	/
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Split, School of Medicine
Place	Split
Date	July 26, 2016
INFORMATION ON ADDITIONAL TRAINING	
Year	2014.
Place	Helsinki
Institution	Aalto University, Finnish National Board of Education
Field of training	Higher education, Education and employability
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German, 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Computers in radiology, New technologies in radiology, Introduction to scientific work.
Authorship of university textbooks from the field of the course	1. S. Janković, F. Mihanović i suradnici. Radiološki uređaji i oprema u radiologiji, radioterapiji i nuklearnoj medicini, Sveučilište u Splitu, Sveučilišni odjel zdravstvenih studija, Split, 2015., ISBN 978-953-7220-21-1

	2. F. Mihanović. Computed tomography as a method in conservation and restoration, Saarbrücken, LAP, LAMBERT Academic Publishing, 2013., ISBN 978-3-659-45047-1 3. S. Janković, F. Mihanović. Uvod u radiologiju, Sveučilište u Splitu, Sveučilišni odjel zdravstvenih studija, Split, 2013. ISBN 978-953-7220-17-4
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Ivanović, A. i Mihanović, F. (2020). Accuracy of measurements performed on digital panoramic radiographs with and without an extra-oral calibration object. ST-OPEN, 1 (-), 1-11. https://doi.org/10.48188/so.1.1 2. Bazina AM, Peričić TP, Galić I, Mihanović F, Kovačević N, Galić T. Knowledge and attitudes of water polo coaches about sports-related dental injuries and dental emergency procedures. Dent Traumatol. 2020 Aug;36(4):382-389. doi: 10.1111/edt.12551. Epub 2020 Mar 4. PMID: 32058660. 3. Marić, Josipa; Bašić, Željana; Jerković, Ivan; Mihanović, Frane; Anđelinović, Šimun; Kružić, Ivana, Facial reconstruction of mummified remains of Christian Saint-Nicolosa Bursa // Journal of cultural heritage, 42 (2020), 249-254 doi:10.1016/j.culher.2019.08.008 4. Kružić, Ivana; Jerković, Ivan; Mihanović, Frane; Marušić, Ana; Anđelinović, Šimun; Bašić, Željana, Virtual autopsy in legal medicine: literature review and example of application on the mummified remains // Medicine, Law & Society, 11 (2018), 2; 67-90 doi:10.18690/ml&s.11. 2 .67 -90.2018 5. Jerković, Ivan; Kružić, Ivana; Bašić, Željana; Mihanović, Frane; Anđelinović, Šimun,The oldest evidence of calcific myonecrosis? // International journal of osteoarchaeology, 28 (2017), 2; 199-200 doi:10.1002/oa.2641
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	Estimation of the age of the subjects based on magnetic resonance imaging of the knee using artificial intelligence
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Postgraduate doctoral study, Basic course of communication skills for SOZS employees
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Acknowledgment from SOZS

First and last name and title of teacher	**Nina Mišić Radanović, PhD, Assistant professor**
The course he/she teaches in the proposed study programme	Social and Health Legislation
GENERAL INFORMATION ON COURSE TEACHER	
E-mail address	nina.misic.radanovic@unist.hr
Personal web page	
Year of birth	1988.
Scientist ID	348995
Research or art rank, and date of last rank appointment	
Research-and-teaching, art-and-teaching or teaching rank, and date of last rank appointment	Assistant professor, 10.7.2018.
Area and field of election into research or art rank	Scientific area: social sciences Scientific field: law
INFORMATION ON CURRENT EMPLOYMENT	
Institution where employed	University of Split, University Department of Forensic sciences
Date of employment	14.11. 2012.
Name of position (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Criminal law, Criminal procedure law, Civil law, Civil procedure law, Medical law
Function	Head of Chair of law sciences
INFORMATION ON EDUCATION – Highest degree earned	
Degree	PhD.
Institution	Faculty of law, University of Mostar
Place	Mostar
Date	21.10.2017.
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English - 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian - 3
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (name title of course, study programme where it is/was offered, and level of study programme)	- Law in Forensic sciences - graduate university study of Forensics - Civil law and civil procedure - graduate university study of Forensics - Criminal law - graduate university study of Forensics - Forensics and liability in medicine - graduate university study of Forensics - Introduction to law I. – undergraduate university study of Forensics

	- Introduction to law II. - undergraduate university study of Forensics
Authorship of university/faculty textbooks in the field of the course	
Professional, scholarly and artistic articles published in the last five years in the field of the course (5 works at most)	1. MIŠIĆ RADANOVIĆ, Nina: *Pristanak pacijenta na medicinski zahvat kao razlog za isključenje protupravnosti,* Zbornik radova Pravnog fakulteta u Splitu, god.55. 4/2018. str. 865.-892. 2. MIŠIĆ RADANOVIĆ, Nina: *Novo kazneno djelo prisile prema zdravstvenom radniku,* Zbornik radova s međunarodnog kongresa „1. Kongres KOKOZ-a i 3. Hrvatski kongres medicinskog prava s međunarodnim sudjelovanjem“, Rabac, 2019., str. 147.-170. 3. MIŠIĆ RADANOVIĆ, Nina: *Prijepori o kaznenoj odgovornosti medicinskih djelatnika za stručnu pogrešku*, Godišnjak Akademije pravnih znanosti Hrvatske, Vol. XI. No.1, 2020, str. 41-62, 4. MIŠIĆ RADANOVIĆ, Nina, VUKUŠIĆ, Ivan: *Quality standard and causality in healthcare malpractice,* ECLIC, Osijek, rujan 2020. 5. MIŠIĆ RADANOVIĆ, Nina: *Pravni aspekti odbijanja medicinskog postupka*, Godišnjak Akademije pravnih znanosti Hrvatske, XII (2021.) str. 263.-287.
Professional and scholarly articles published in the last five years in subjects of teaching methodology and teaching quality (5 works at most)	
Professional, science and artistic projects in the field of the course carried out in the last five years (5 at most)	
The name of the programme and the volume in which the main teacher passed exams in/acquired the methodological-psychological-didactic-pedagogical group of competences?-pedagoške kompetencije?	Seminar for development and training of pedagogical competencies of university lecturers, CIRCO - Center for research and development of lifelong learning, February 28, 2013.
PRIZES AND AWARDS, STUDENT EVALUATION	
Prizes and awards for teaching and scholarly/artistic work	Commendation to the first author of the best scientific work created at the University Department of Forensic Sciences published in the academic year 2019/2020 Acknowledgment for special contribution to the work of the Commission for launching the undergraduate university study of Forensics
Results of student evaluation taken in the last five years for the course that is comparable to the course described in the form (evaluation organizer, average grade, note on grading scale and course evaluated)	Student surveys – average grade 4,8

Title, name and last name	**Assistant professor Antonela Matana, PhD**
Title of the course at the proposed study programme	Healthcare Informatics and Statistics Use of Scientific Technology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	antmatana@ozs.unist.hr
Year of birth	1989.
Scientist ID	365156
CROSBI profile ID	34453
Research rank and date of the last appointment	Research associate, 10.7. 2019
Research and teaching or teaching rank, and the date of the last appointment	Assistant professor, 24.11.2020.
Area and field of appointment into research rank	Biomedicine and Health, Basic Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	The University of Split, University Department of Health Studies
Date of employment	20. 4 2021
Job title (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Biostatistics
Position in the institution	Assistant professor
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	University of Split, School of Medicine
Place	Split, Croatia
Date	21.12.2018
INFORMATION ON ADDITIONAL TRAINING	
Year	2019.
Place	Split, Croatia
Institution	The University of Split, Faculty of Science
Field of training	Bioinformatics and Statistics
Year	2017
Place	London, England
Institution	Imperial College London, London
Field of training	Genome-wide association studies
Year	2017
Place	Split, Croatia
Institution	The University of Split, Faculty of Science
Field of training	Bioinformatics and Statistics
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English - 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	-
Authorship of university textbooks from the field of the course	-
Professional and research papers	Matana A, Boutin T, Torlak V, Brdar D, Gunjaca I, Kolcic I, et al. Genome-wide analysis identifies two susceptibility loci for positive

published in the last five years from the field of the course **(max 5 references)**	thyroid peroxidase and thyroglobulin antibodies. J Clin Endocrinol Metab. 2019. Matana A, Ziros PG, Chartoumpekis DV, Renaud CO, Polasek O, Hayward C, et al. Rare and common genetic variations in the Keap1/Nrf2 antioxidant response pathway impact thyroglobulin gene expression and circulating levels, respectively. Biochem Pharmacol. 2019. Matana A, Popovic M, Boutin T, et al. Genetic Variants in the ST6GAL1 Gene Are Associated with Thyroglobulin Plasma Level in Healthy Individuals. Thyroid. 2019;29(6):886-893. Punda A, Škrabić V, Torlak V, Gunjača I, Boraska Perica V, Kolčić I, Polašek O, Hayward C, Zemunik T, Matana A. Thyroid hormone levels are associated with metabolic components: a cross-sectional study. Croat Med J. 2020 Jul 5;61(3):230-238. Matana A, Brdar D, Torlak V, Boutin T, Popović M, Gunjača I, Kolčić I, Boraska Perica V, Punda A, Polašek O, Barbalić M, Hayward C, Zemunik T. Genome-wide meta-analysis identifies novel loci associated with parathyroid hormone level. Mol Med. 2018 Apr 11;24(1):15.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	-
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	2021 – Principal investigator at the Institutional project "Adherence to the pattern of the Mediterranean diet and the level of physical activity in children and youth in Croatia" 2020 - 2024 Associate at the Croatian Science Foundation "Research project" Regulation of thyroid and parathyroid function and blood calcium homeostasis ", leader prof. Tatijana Zemunik 2014 - 2018 Doctoral student at the Croatian Research Institute of Research Project IP-11-2013 No. 1498 "Discovery of new gene loci involved in the regulation of thyroid and thyroid function", leader prof. Tatijana Zemunik
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Undergraduate study of Mathematics and Informatics at the Faculty of Science in Split, Croatia.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	2021. University of Split Science Award 2020 in the category of Young Scientists for the best-ranked scientists according to WoSCC and Scopus databases 2017. Best Presentation Award, „ICHG 2017: 19th International Conference on Human Genetics, December 18-19 2017'', Bangkok, Thailand 2012. Scholarship of the European Society of Human Genetics (ESHG) for participation in a training course: „Introduction to the statistical analysis of genome-wide association studies”, Department of Genomics of Common Disease, Imperial College London, UK

Title, name and last name of the course leader	**Tatjana Matijaš, Master of Radiological Technology, lecturer, doctoral student**
Title of the course at the proposed study programme	Introduction to Radiology Radiobiology and Radiation Protection Radiological Propedeutics Receptors of radiological images Clinical Practice I Theories of Imaging Conventional Radiological Methods Radiological Devices and Equipment Clinical Practice II Clinical Practice III
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	tmatijas@ozs.unist.hr
Personal web page	
Year of birth	1974.
Scientist ID	
CROSBI profile ID	40385
Research rank and date of the last appointment	
Research and teaching or teaching rank, and the date of the last appointment	Lecturer, 2017.
Area and field of appointment into research rank	Biomedicine and Health; Clinical Medical Sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split; University Department of Health Studies
Date of employment	8th September 2017.
Job title (professor, researcher, associate teacher, etc.)	Lecturer
Field of research	Radiological technology
Position in the institution	Deputy Head of the Department of Radiological Technology
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Master of Radiological Technology
Institution	University of Split; University Department of Health Studies
Place	Split, Croatia
Date	22th September 2016.
INFORMATION ON ADDITIONAL TRAINING	
Year	2021.
Place	Poreč, Croatia
Institution	Croatian Chamber of Health Workers, Vocational class for health radiological-technological activity
Field of training	Application of CAD-a in the diagnosis of breast cancer
Year	2021.
Place	Poreč, Croatia
Institution	Croatian Chamber of Health Workers, Vocational class for health radiological-technological activity
Field of training	Online classes during the Covid-19 pandemic
Year	2021.
Place	Karanac, Hrvatska
Institution	Croatian Society of Radiological Technology

Field of training	Management of health radiological and technological activities in times of crisis
Year	2021.
Place	Split, Croatia (on-line)
Institution	Cochrane Croatia
Field of training	Systematic reviews of the literature
Year	2020.
Place	Split, Croatia
Institution	University of Split, University Department of Health Studies
Field of training	Communication skills in working with students; basic small group leadership and teamwork skills; curriculum planning, implementation, and assessment; and the mentoring process.
Year	2019.
Place	Primošten, Croatia
Institution	Croatian Chamber of Health Workers, Vocational class for health radiological-technological activity
Field of training	An overview of the impact factors of published papers on the application of artificial intelligence in radiology
Year	2019.
Place	Karanac, Hrvatska
Institution	Croatian Society of Radiological Technology
Field of training	Quality assurance in radiological technology
Year	2018.
Place	Split, Croatia
Institution	Croatian Society of Radiologists
Field of training	Clinical radiology and radiation protection
Year	2018.
Place	Split, Croatia
Institution	University of Split, University Department of Health Studies & Karolinska Institutet, Department of Clinical Science, Intervention and Technology, Division of Radiography
Field of training	1st International Summer School „News in radiological technology and radiography“
Year	2017.
Place	Opatija, Croatia
Institution	Medical Polytechnic of Zagreb
Field of training	Linking education and best practice
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (3)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	

COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Course associate (from the academic year 2017/2018 to 2021/2022): ***University undergraduate programme in radiological technology*:** Introduction to Radiology (1st year); Radiobiology and Radiation Protection (1st year); Radiological Propedeutics (1st year); Receptors of radiological images (1st year); Clinical Practice I (1st year); Theories of Imaging (2nd year); Conventional Radiological Methods (2nd year); Radiological Devices and Equipment (2nd year); Clinical Practice II (2nd year); Clinical Practice III (3nd year); ***University undergraduate programme in midwifery:*** Basics of Radiology and Radiation Protection (2nd year) ***University undergraduate programme in nursing:*** Basics of Radiology and Radiation Protection (2nd year) ***University undergraduate programme in physiotherapy:*** Basics of Radiology
Authorship of university textbooks from the field of the course	
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Matijaš T. Forensic dental radiography. Radiological journal. 2018;(3):20–25. 2. Grgat J, Matijaš T. Comparison of Different Radiographic Image Receptors. Radiological journal. 2021;(1):2-10.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Passed courses at the Graduate Study of Radiological Technology: Pedagogy and Didactics and Teaching Methods. Completed the continuing education course "Communication and Pedagogical Skills for Clinical Mentors" organised by the "Alumni" Association of Students of the University Department of Health Studies, University of Split (2020). Acquired knowledge of communication skills in working with students; basic skills of leading a small group and working in a team; planning, implementing and evaluating curricula and the mentoring process.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name of the course leader	**Associate professor Ante Obad, MD, PhD**
Title of the course at the proposed study programme	Physiology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	ante.obad@ozs.unist.hr
Personal web page	https://publons.com/researcher/2124876/ante-obad/
Year of birth	1972
Scientist ID	276655
CROSBI profile ID	23191
Research rank and date of the last appointment	Senior research associate, 04/07/2018
Research and teaching or teaching rank, and the date of the last appointment	Associate professor, 22/01/2019
Area and field of appointment into research rank	Biomedicine and Health, Basic medical sciences, Human physiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split, University Department of Health Studies
Date of employment	16/10/2012
Job title (professor, researcher, associate teacher, etc.)	Associate professor
Field of research	Internal medicine, Cardiology
Position in the institution	Associate professor, Deputy Head of the Department, Assistant to the Head of the Department for Development and Innovation
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD
Institution	School of Medicine, University of Zagreb
Place	Zagreb, Croatia
Date	2009
INFORMATION ON ADDITIONAL TRAINING	
Year	1998 and 1999
Place	Zagreb, Croatia
Institution	Clinical Hospital Merkur, Department for Radiology
Field of training	Postgraduate course for medical doctors I category: “Ultrasound of abdominal organs” (1998); “Ultrasound of thyroid gland and surface organs” (1998); “Ultrasound-doppler of blood vessels” (1999)
Year	2001
Place	London, United Kingdom
Institution	Imperial College of Medicine, Department for Cardiology
Field of training	Course in Echocardiography
Year	2002
Place	Bad-Oyenhausen, Germany
Institution	Herz und Diabeteszentrum, Department for Cardiology
Field of training	Education in area of Echocardiography
Year	2007
Place	Zagreb, Croatia
Institution	Clinical Hospital Dubrava
Field of training	Course in Transesophageal Heart Ultrasound
Year	2009
Place	Liverpool, United Kingdom
Institution	Jhon Moores University, School of Sport and Exercise Sciences
Field of training	Course in Cardiovascular Ultrasound in Sport and Exercise Science

Year	2010
Place	Trondheim, Norway
Institution	NTNU Trondheim
Field of training	Education from echocardiography, tissue doppler
Year	2013
Place	Baar, Switzerland
Institution	Switzerland cardiology society
Field of training	Course on CPET (Cardiopulmonally exercise training)
Year	2018-2019
Place	Geneva, Switzerland
Institution	Geneva School of Diplomacy and International Relations
Field of training	Executive diploma in diplomatic practice
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English – excellent (5)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Lecturer at the Department of Physiology, Faculty of Medicine since 2004 an in other study programs of health faculties University of Split (Dentistry, Pharmacy, English study of Medicine). Since 2012 is a course leader of "Physiology" at the University Department of Health Studies
Authorship of university textbooks from the field of the course	-
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Zubac, Damir; Obad, Ante; Zec, Mirela; Bosnjak, Ana; Ivancev, Vladimir; Valic, Zoran. Spleen Contraction During Step-Transition Supine Cycling Exercise: Preliminary findings // The FASEB journal, 35 (2021), 1; 456-456 2. Zubac, Damir; Obad, Ante; Zec, Mirela; Bosnjak, Ana; Ivancev, Vladimir; Valic, Zoran. Spleen Contraction During Step-Transition Supine Cycling Exercise: Preliminary findings // The FASEB journal, 35 (2021), 1; 456-456 3. Šegrt Ribičić, Ivana; Valić, Maja; Božić, Joško; Obad, Ante; Glavaš, Duška; Glavičić, Igor; Valić, Zoran Influence of oxygen enriched gases during decompression on bubble formation and endothelial function in self-contained underwater breathing apparatus diving: a randomized controlled study // Croatian medical journal, 60 (2019), 265-272 4. Mijacika, Tanja; Frestad, Daria; Kyhl, Kasper; Barak, Otto; Drviš, Ivan; Secher, Niels H.; Buca, Ante; Obad, Ante; Dujic, Ante; Madsen, Per Lav Blood pooling in extrathoracic veins after glossopharyngeal insufflation // European journal of applied physiology, 117 (2017), 4; 641-649 5. Susilovic-Grabovac, Zora; Obad, Ante; Duplančić, Darko; Banić, Ivana; Brusoni, Denise; Agostoni, Piergiuseppe; Vuković, Ivica; Dujic, Zeljko; Bakovic, Darija 2D speckle tracking echocardiography of the right ventricle free wall in SCUBA divers after single open sea dive // CLINICAL AND EXPERIMENTAL

	PHARMACOLOGY AND PHYSIOLOGY, 45 (2017), 3; 234-240
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	-
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	Active participation in the realization of scientific-research projects: 1. Diving with compressed air and cardiovascular system; project code: 216-2160133-0130; duration of the project: 01/01/2007-31/12/2013 2. Apnea diving and cardiovascular system; project code; 216-2160133-0330; duration of the project: 01/01/2007-31/12/2013 3. Cardiovascular effects of wine and its ingredients; project code: 216-2160547-0537; duration of the project: 01/01/2007-31/12/2013 4. Natural sources of resveratrol and its synergistic effect with other polyphenols; project code: 011-2160547-2226; duration of the project: 01/01/2007-01/01/2009 5. Heart failure in Croatia; project code: 108-1081875-1927; duration of the project: 01/01/2007-01/01/2009
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Acknowledgment of the University Department of Health Studies for contribution to the University Department of Health Studies University of Split; May 2021

Title, name and last name of the course leader	**Associate professor Tomislav Omrčen, PhD**
Title of the course at the proposed study programme	Radiotherapy and Oncology; Planning in Radiotherapy; Evidence based Methodology and Technology in Oncology and Radiotherapy
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	tomislavomrcen@yahoo.com
Personal web page	
Year of birth	1968.
Scientist ID	345720
CROSBI profile ID	32531
Research rank and date of the last appointment	Senior research associate, 21.4.2021.
Research and teaching or teaching rank, and the date of the last appointment	Associate professor, 25.11.2021
Area and field of appointment into research rank	Biomedicine and Health, Clinical Medical Sciences, Oncology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	School of Medicine, University of Split
Date of employment	17.11.2016.
Job title (professor, researcher, associate teacher, etc.)	Professor
Field of research	Urologic oncology, gastrointestinal tumors
Position in the institution	Deputy Head, Chair of Oncology
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Medical doctor
Institution	School of Medicine, University of Zagreb
Place	Zagreb
Date	1994.
INFORMATION ON ADDITIONAL TRAINING	
Year	2000-2004., Specialization in Radiotherapy and Oncology
Place	Split
Institution	University Hospital Split
Field of training	Oncology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English, 3
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German, 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Head of compulsory courses Tumors of childhood, Tumors of the digestive system and Tumors of the central nervous system at the University Postgraduate Specialist Study "Oncology and Radiotherapy" , School of Medicine, University of Split.
Authorship of university textbooks from the field of the course	E Vrdoljak, I Belac Lovasić, Z Kusić, D Gugić, A Juretić. Clinical oncology. Medicinska naklada, Zagreb 2018.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Vrdoljak E, Magri C, Gamulin M, Bošković L, **Omrčen T**, Bajić Ž et al. Real-world safety and efficacy of nivolumab for ≥ 2nd line treatment of metastatic renal cell carcinoma: A retrospective cohort study in Croatia, Hungary, and Malta**.** Neoplasma 2021;68(1):208-215.

	2. **Omrčen T,** Eterović D, Vrdoljak E**.** Predictors of resistance to abiraterone acetate or enzalutamide in patients with metastatic castration-resistant prostate cancer in post-docetaxel setting: a single-center cohort study. Anticancer Drugs. 2020;31(7):742-746. 3. **Omrčen T**, Katić A, Tomić S, Eterović D, Vrdoljak E. Predictors of outcome in elderly patients with metastatic colorectal cancer: the final results of a prospective phase II study of bevacizumab in combination with capecitabine as first-line treatment. Anticancer Drugs. 2020;31(5):518-522. 4. Soljic M, Mrklic I, Tomic S, **Omrcen T**, Sutalo N, Bevanda M et al. Prognostic value of vitamin D receptor and insulin-like grpwth factor receptor 1 expression in triple-negative breast cancer. J Clin Pathol. 2018;71(1):34-39. 5. **Omrcen T,** Katic A, Vrdoljak E. The role of the multidisciplinary team in the decision making process in stage one testicular cancer – Retrospective cohort analysis. J BUON. 2017; 22(5):1333-1337.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	

Title, name and last name of the course leader	**Valdi Pešutić-Pisac, full professor**
Title of the course at the proposed study programme	Pathology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	valdypp@gmail.com
Personal web page	no
Year of birth	1962
Scientist ID	147360
CROSBI profile ID	26679
Research rank and date of the last appointment	Full scientific consultant 10.07.2019
Research and teaching or teaching rank, and the date of the last appointment	Full professor 12.07.2019.
Area and field of appointment into research rank	Biomedicine and health, field of clinical medical sciences
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	KBC Split; Medicinski Fakultet u Splitu
Date of employment	1989; 2004
Job title (professor, researcher, associate teacher, etc.)	Pathologist, professor
Field of research	Pathology, education
Position in the institution	Pathologist, Head of Department of Pathology
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD; full professor
Institution	Medical School University of Zagreb; Medical School University of Split
Place	Zagreb; Split
Date	2000; 2019
INFORMATION ON ADDITIONAL TRAINING	
Year	1995.; 1996.; 1998.;1999; 2001; 2003;2005
Place	Rome, Zagreb
Institution	Department of Pathology, Policlinico “A.Gemelli”, University of »Sacro Cuore» Rome, Italy, Department of Pathology, Tumor Institute , Zagreb Hrvatska.,
Field of training	Pathology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 5
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Italian 5
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Undergraduate teaching: - Undergraduate teaching in Pathology, Doctor of Medicine, Faculty of Medicine, University of Split and Mostar - Undergraduate teaching in Pathology, Dental Medicine, Faculty of Medicine in Split - Undergraduate teaching in Pathology, study Pharmacy, Faculty of Medicine in Split

	-Undregraduate teaching in Pathology, Medical Studies in English, Faculty of Medicine in Split - study of Nursing, University Department of Health Studies, University of Split -study of Nursing, University of Dubrovnik Postgraduate teaching - Postgraduate doctoral study "Evidence-based medicine" of the Medical Faculty in Split (Elective course: "Precancerous lesions of the digestive system") -Postgraduate doctoral study "Biology of neoplasms", Faculty of Medicine Split (elective course "Molecular diagnostics of tumors of the urinary system and male reproductive system"
Authorship of university textbooks from the field of the course	Author of the chapter “Gastrointestinal system” in books : 1. Damjanov I, Jukić S. Specijalna patologija, Medicinska naklada, Zagreb, 2004; 221-277. 2. Damjanov I, Jukić S, Nola M. Patologija. Medicinska naklada , Zagreb, 2008; 391-435. 3. Damjanov I, Jukić S, Nola M. Patologija. Medicinska naklada , Zagreb, 2011;505-564. Author of the chapter “Endocrine System Diseases” in books: 1. Damjanov I, Seiwerth S,Jukić S, Nola M. Patologija. Medicinska naklada , Zagreb, 2014; 659-696 2. Damjanov I, Seiwerth S,Jukić S, Nola M. Patologija. Medicinska naklada , Zagreb, 2018;659-696 Author of the chapter “Pathology of Head and Neck” u knjizi: Prgomet D i sur. Head and Neck Tumors, Medicinska naklada, Zagreb, 2019; 21-46.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Brčić L, Barić A, Benzon B, Brekalo M, Gračan S, Kaličanin D, Škrabić V,Zemunik T, Barbalić M, Novak I, **Pešutić Pisac** V, Punda A, Boraska Perica V. AATF and SMARCA2 are associated with thyroid volume in Hashimoto's thyroiditis patients. Sci Rep. 2020 Feb 4;10(1):1754. doi: 10.1038/s41598-020-*58457-x. PMID: 32019955; PMCID: PMC7000742* 2.Tonkić A, Vukovic J, Vrebalov Cindro P, **Pesutic Pisac V**, Tonkic M. Diagnosis of Hellicobacter pylori infection: A short review. Wien Klin Wochenschr. 2018 ;130(17-18): 530-534 3.Kontić M.Čolović Z,Paladin I, Gabelica M,Barić A,**Pešutić-Pisac V**. Association between EGFR expression and clinical outcome of laryngeal HPV squamous cell carcinoma, Acta Otolaryngol. 2019 Aug 20:1-5 4. Punda A, Bedeković V, Barić A, Kontić M, Čolović Z, Vanjaka Rogošić L, Punda H, Kunac N, Grandić L, **Pešutić Pisac V**. RET expression and its correlation with clinicopathologic data in papillary thyroid carcinoma. Acta Clin Croat. 2018 Dec;57(4):646-652 5.Barić A, Marković V, Eterović D, Bedeković V,Kontić M, Juretić Kuščić L, **Pešutić Pisac V,**Punda A. Cyclin D1, RET and p27 Expression in Papillary Microcarcinoma. Acta Clin Croat 2017; 56(1): 15-20.
Professional and research papers	

In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	1. Carcinogenesis and prognostic markers in laryngeal squamous cell carcinoma - Code: 216-0000000-0085; Ministry of science, education and sport – Head of project 2. Regulation of thyroid and parathyroid function and blood calcium homeostasis - associate on project (1. 3. 2020. – 29. 2. 2024). Head of project: Prof. dr. sc. Tatijana Zemunik 3. Genetic and epigenic markers as indicators of aggressiveness of differentiated thyroid cancer (ThyroGene Mark)- associate on project Croatian Science Foundation project Head of project : academician Zvonko Kusić
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	Medical school of Split- Educator education course
PRIZES AND AWARDS	
Prizes and awards for teaching and research	Award for the best professor- Medical school of Split 2009. Award of Croatian Medical Association 2010.

Title, name and last name of the course leader	**Assoc. prof. Zenon Pogorelić, MD, PhD**
Title of the course at the proposed study programme	Surgery and Traumatology
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	zpogorelic@kbsplit.hr
Personal web page	https://www.researchgate.net/profile/Zenon-Pogorelic
Year of birth	1979.
Scientist ID	287942
CROSBI profile ID	10206
Research rank and date of the last appointment	senior research associate; 2020.
Research and teaching or teaching rank, and the date of the last appointment	asocciate professor, 2020.
Area and field of appointment into research rank	Biomedicine and health, branch of surgery
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	Univetsity Hospital of Split
Date of employment	01.12.2006.
Job title (professor, researcher, associate teacher, etc.)	Pediatric surgeon
Field of research	Pediatric surgery
Position in the institution	Head of department of pediatric surgery
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	PhD, Associate professor
Institution	University of Split, School of Medicine
Place	Split
Date	
INFORMATION ON ADDITIONAL TRAINING	
Year	2016- 2018-
Place	Lyon
Institution	Hopital Femme Merre Enfant, Lyon, Francuska
Field of training	Pediatric surgery, Minimally invasive surgery
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (5)
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	Spanish (4)
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Head of department of surgery at University of Split, School of Medicine
Authorship of university textbooks from the field of the course	Jurić I, Pogorelić Z, Todorić D. – Embrionalni tumori u djece. In: Čulić V. et al. Genetičko informiranje u praksi. Medicinska naklada, 2015: 69 – 73.
Professional and research papers	1) Pogorelić Z, Lukšić B, Ninčević S, Lukšić B, Polašek O. Hyponatremia as a predictor of perforated acute appendicitis in

published in the last five years from the field of the course **(max 5 references)**	pediatric population: A prospective study. J Pediatr Surg. 2021;56(10):1816-1821. 2) Pogorelić Z, Čohadžić T, Jukić M, Nevešćanin Biliškov A. Percutaneous internal ring suturing for the minimal invasive treatment of pediatric inguinal hernia: A 5-year single surgeon experience. Surg Laparosc Endosc Percutan Tech. 2021;31(2):150-154. 3) Pogorelić Z, Milanović K, Veršić AB, Pasini M, Divković D, Pavlović O, Lučev J, Žufić V. Is there an increased incidence of orchiectomy in pediatric patients with acute testicular torsion during COVID-19 pandemic?-A retrospective multicenter study. J Pediatr Urol. 2021;17(4):479.e1-479.e6. 4) Pogorelić Z, Lukšić AM, Mihanović J, Đikić D, Balta V. Hyperbilirubinemia as an Indicator of Perforated Acute Appendicitis in Pediatric Population: A Prospective Study. Surg Infect (Larchmt). 2021 doi: 10.1089/sur.2021.107. 5) Pogorelić Z, Bjelanović D, Gudelj R, Jukić M, Petrić J, Furlan D. Video-assisted thoracic surgery in early stage of pediatricpleural empyema improves outcome. Thorac Cardiovasc Surg. 2021;69(5):475-480.
PRIZES AND AWARDS	
Prizes and awards for teaching and research	2004. Rector's Award for outstanding results achieved in the study 2018. Award of the Croatian Medical Chamber for scientific contribution in the category of young scientists 2021. Science Award of the University of Split

First and last name and title of teacher	**Davorka Sutlovic, Full professor with tenure**
The course he/she teaches in the proposed study programme	Introduction to Scientific Work
GENERAL INFORMATION ON COURSE TEACHER	
Address	R. Boškovića 35, 21000 Split
Telephone number	+385/21/564801
E-mail address	dsutlovic@ozs.unist.hr
Personal web page	http://ozs.unist.hr/o-odjelu/ustroj-odjela/uprava/pomocnik-procelnika-odjela-za-nastavu
Year of birth	1961.
Scientist ID	256403
Research or art rank, and date of last rank appointment	Scientific advisor with tenure; 2019.
Research-and-teaching, art-and-teaching or teaching rank, and date of last rank appointment	Full professor with tenure 2020.
Area and field of election into research or art rank	Biomedicine and health- Basic medical sciences Interdisciplinary sciences - Basic medical sciences/pharmacy
INFORMATION ON CURRENT EMPLOYMENT	
Institution where employed	University of Split -University department of health studies / Medical School Split
Date of employment	2019. /2008.
Name of position (professor, researcher, associate teacher, etc.)	Full professor with tenure
Field of research	chemistry and instrumental tehniques
Function	Head of the Department of Basic medical sciences; Assistant to the Head of Department for Education
INFORMATION ON EDUCATION – Highest degree earned	
Degree	Ph.D.
Institution	UNIVERSITY OF SPLIT- SCHOOL OF MEDICINE
Place	SPLIT
Date	2005
INFORMATION ON ADDITIONAL TRAINING	
Year	2018; 2015; 2011; 2007; 2005; 2005; 2005; 2004; 2004; 1998;
Place	*Slovenia-Otočec; Italy-Florence; Italy, Pavia and Verona; Greek-Athens; ZAGREB; Germany – Duisburg; ZAGREB; Plitvice; Germany - Darmstadth; PULA ;*
Institution	European Societies of Toxicology ; Forensic Toxicology Unit, Department of Health Science, University of Florence; Clinical Hospital; Medical School; Medical School- Department of forensic science and criminology; Shimadzu; Center for Criminalistic Investigation " Ivan Vučetić"; European Societies of Toxicology; Applied Biosystems; European Societies of Toxicology;
Field of training	Specialized toxicology course - Regulatory toxicology; Toxicology; Clinical toxicology; Forensic toxicology; Forensic toxicology; Toxicology; Forensic toxicology; Toxicology; Toxicology; Toxicology
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	Croatian
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English (3)
COMPETENCES FOR THE COURSE	

Earlier experience as course teacher of similar courses (name title of course, study programme where it is/was offered, and level of study programme)	**1. UNDERGRADUATE AND GRADUATE**: ON MEDICINE STUDY from 2000. - Forensic science from 2007. - Small dose of toxicology from 2007. - Drugs Abuse in sport 2. **UNDERGRADUATE AND GRADUATE**: STUDY OF PHARMACY from 2011. - Forensic pharmacy from 2011. - Pharmaceutical toxicology 3. **UNDERGRADUATE AND GRADUATE**: STUDY OF MEDICAL LABORATORY DIAGNOSTICS from 2012. - INSTRUMENTAL TECHNIQUES IN MLD from 2012. - Food Toxicology from 2019. - General chemistry and stoichiometry from 2019. - Analytical chemistry from 2019. - Organic chemistry from 2019. - Introduction to scientific work 4. **GRADUATE**: STUDY FOR FORENSIC SCIENCES from 2010. -2017. Forensic chemistry and toxicology I from 2010. -2017. Forensic chemistry and toxicology II from 2010. - 2017. Applied forensic toxicology from 2010. - 2017. Food Toxicology 5. **POSTGRADUATE STUDY:** 5.1.ON MEDICAL SCHOOL SPLIT from 2007. - Biochemical mechanisms of toxicity 5.2.ON LAW SCHOOL SPLIT - STUDY OF MEDICAL LAW from 2007. - Forensic medicine from 2007. - CSI Split - Medical criminology 5.3. ON PHARMACEUTICAL AND BIOCHEMISTRY SCHOOL OF ZAGREB STUDY OF TOXICOLOGY from 2011. - Forensic toxicology in human medicine
Authorship of university/faculty textbooks in the field of the course	1. SutloviC Davorka, et al. Fundamentals of Forensic Toxicology. Split: Redak; 2011. 2. Sutlovic Davorka, et al. Food Toxicology. Split: Redak; 2011. 3. Sutlović Davorka. Basics of chemistry, forensics manual for students. Split: Redak; 2013. 4. Kovačić, Zdravko; Nestić, Marina; Sutlović, Davorka. Forensic toxicology // Forensic medicine and deontology/ Mayer, Davor (ur.). Zagreb: Medicinska naklada, 2018. 153-201.
Professional, scholarly and artistic articles published in the last five years in the field of the course (5 works at most)	1. Sutlović, Davorka; Kuret, Sendi; Definis, Marija New psychoactive and classic substances in pooled urine samples collected at the Ultra Europe festival in Split, Croatia *// Arhiv za higijenu rada i toksikologiju,* **72** (2021), 3; 198-204 doi:10.2478/aiht-2021-72-3509 (međunarodna recenzija, članak, znanstveni) 2. Nedoklan, Srđan; Knezović, Zlatka; Knezović, Nina; Sutlović, Davorka Nutrition and mineral content in human teeth through THE CENTURIES *// Archives of oral biology,* **124** (2021), 105075,

	8 doi:.org/10.1016/j.archoralbio.2021.105075 (međunarodna recenzija, članak, znanstveni) 3. Sutlović, Davorka; Ključević, Željko; Kuret, Sendi ABCB1, CYP2B6, and CYP3A4 genetic polymorphisms do not affect methadone maintenance treatment in HCV-positive patients *// Arhiv za higijenu rada i toksikologiju,* **71** (2020), 4; 353-358 doi:10.2478/aiht-2020-71-3378 (međunarodna recenzija, članak, znanstveni) 4. Patrician, Alexander; Versic-Bratincevic, Maja; Mijacika, Tanja; Banic; Ivana; Marendic, Mario; Sutlović, Davorka; Dujić, Željko; Ainslie, Philip N. Examination of a New Delivery Approach for Oral Cannabidiol in Healthy Subjects: A Randomized, Double-Blinded, Placebo-Controlled Pharmacokinetics Study. *// Advances in therapy,* **36** (2019), 11; 3196-3210 doi:10.1007/s12325-019-01074-6 (međunarodna recenzija, članak, znanstveni) 5. Ključević, Željko; Benzon, Benjamin; Ključević, Nikola; Veršić Bratinčević, Maja; Sutlović, Davorka Liver damage indices as a tool for modifying methadone maintenance treatment: a cross-sectional study *// Croatian medical journal,* **59** (2018), 298-306 (međunarodna recenzija, članak
Professional and scholarly articles published in the last five years in subjects of teaching methodology and teaching quality (5 works at most)	
Professional, science and artistic projects in the field of the course carried out in the last five years (5 at most)	1. 2007. - Heavy metals in human remains from Klis and Bribir ancient county; LEADER; FUNDING SOURCE - MINISTRY OF SCIENCE, EDUCATION AND SPORTS 2. 2007. - Cardiovascular effects of wine and its constituents; RESEARCHER -FUNDING SOURCE - MINISTRY OF SCIENCE, EDUCATION AND SPORTS 3. Co-leader of the European project "I-SEE European project on New Psychoactive Substance" (2015-2017) 4. Head of the scientific research project of the Government of the Republic of Croatia "Intoxication with new psychoactive substances - treatment protocol" (2017) 5. Head of the scientific research project of the Government of the Republic of Croatia "Monitoring of intoxications with new psychoactive substances by analysis of urine samples" (2018)
The name of the programme and the volume in which the main teacher passed exams in/acquired the methodological-psychological-didactic-pedagogical group of competences?-pedagoške kompetencije?	Mandatory education at the Medical Faculty Split Tempus Project Training of Trainers in Vienna (2x), Pécs and Zagreb
PRIZES AND AWARDS, STUDENT EVALUATION	
Prizes and awards for teaching and scholarly/artistic work	
Results of student evaluation taken in the last five years for the course that is comparable to the course	

described in the form (evaluation organizer, average grade, note on grading scale and course evaluated)	

Title, name and last name of the course leader	**Assistant professor Ivana Štula, MD, PhD**
Title of the course at the proposed study programme	Computerised Tomography Equipment and Workflow Quality Control
GENERAL INFORMATION ON COURSE LEADER	
E-mail address	stulaivana@gmail.com
Personal web page	
Year of birth	1967
Scientist ID	
CROSBI profile ID	40319
Research rank and date of the last appointment	
Research and teaching or teaching rank, and the date of the last appointment	Assistant Professor
Area and field of appointment into research rank	Radiology
INFORMATION ON CURRENT EMPLOYMENT	
Institution of employment	University of Split, School of Medicine
Date of employment	
Job title (professor, researcher, associate teacher, etc.)	Assistant professor
Field of research	Radiology
Position in the institution	
INFORMATION ON EDUCATION – Highest degree achieved	
Degree	Doctor of science
Institution	University of Splt, School of Medicine
Place	Split
Date	08.02.2013
INFORMATION ON ADDITIONAL TRAINING	
Year	
Place	
Institution	
Field of training	
MOTHER TONGUE AND FOREIGN LANGUAGES	
Mother tongue	
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	English 4
Foreign language and command of foreign language on a scale from 2 (sufficient) to 5 (excellent)	German 2
COMPETENCES FOR THE COURSE	
Earlier experience as course teacher of similar courses (title of course, study programme where it is/was held, and level of study programme)	Computed tomography Quality Control of the process and device
Authorship of university textbooks from the field of the course	Mašković J, Jankovic S. Selected chapters of interventional radiology. University of Splt, School of Medicine, Split 2008.
Professional and research papers published in the last five years from the field of the course **(max 5 references)**	1. Vuković I, Brešković T, Duplančić D, Batinić T, **Štula I**, Bulat C, Tomić S. Castelman's disease presenting as a tumorous

	paracardiac formation. Acta clinica Croatica 2016; 55:161-6. 2. Krnić D, Družijanić N, **Štula I**, Čapkun V, Krnić D. Incarcerated inguninal hernia mesh repair: Effect on testicular blood flow and sperm autoimmunity. Med Sci Monit.2016; 22:1524-33 3. Vidjak V, **Štula I**, Matijevic F, Kavur L, Sertić Milić H; Blašković D. Embolisation of pulmonary arteriovenous malformations – case series Pol J Radiol 2018; 83: e326-e332 4. **Štula I,** Marinović Guić M, Lovrić Kojundžić S, Gabrić J. Severe thrombosis of abdominal aorta with distal embolism as the only clinical manifestation of COVID-19 infection . Hrvatski časopis zdravstvenih znanosti, **1** (2021), 1;34-36 doi:10.48188/hczz.1.1.2 5. **Stula I,** Kojundzic SL, Guic MM, Novak K. Carotid artery stenosis in correlation with neck and carotid artery anatomy. Vascular. 2021 May 30:17085381211018603. doi: 10.1177/17085381211018603.
Professional and research papers In methodology and quality of teaching published in the last five years (**max 5 references**)	
Professional and research projects from the field of the course carried out in the last five years (**max 5 references**)	
Within which program and to what extent did the course teacher acquire methodological, psychological, didactic and pedagogical competencies?	
PRIZES AND AWARDS	
Prizes and awards for teaching and research	