SVEUČILIŠTE U MOSTARU S E N A T Ur. broj: 01-2419/23 Mostar, 26. travnja 2023.

Na temelju članka 53. Statuta Sveučilišta u Mostaru (ur. broj: 01-1685/20 od 26. veljače 2020. godine) i članka 11. Pravilnika o postupku donošenja novih i revizije postojećih studijskih programa na Sveučilištu u Mostaru (ur. broj: 01-993-1/22 od 23. veljače 2022. godine) Senat Sveučilišta u Mostaru je na 401. sjednici, održanoj 26. travnja 2023. godine, donio

ODLUKU

o usvajanju revidiranog Nastavnog plana i programa

1.

Usvaja se revidirani Nastavni plan i program sveučilišnog studija Medicine na engleskom jeziku na Medicinskom fakultetu Sveučilišta u Mostaru.

11.

Sastavni dio ove Odluke čini revidirani Nastavni plan i program sveučilišnog studija Medicine na engleskom jeziku na Medicinskom fakultetu Sveučilišta u Mostaru.

111.

Odluka stupa na snagu danom donošenja.



Dostaviti:

- Medicinskom fakultetu 2x,
- pismohrani.



MEDICAL STUDIES IN ENGLISH INTEGRATED UNDERGRADUATE AND GRADUATE UNIVERSITY STUDY PROGRAMME CURRICULUM

Mostar, April, 2023

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1. INTRODUCTION

The curriculum of the integrated, undergraduate and graduate, university study programme Medical Studies in English (MSE) is the result of the regular review process, which began with the Decision of the Senate at the session held on February 26, 2022 (No. 01-993-1 / 22). The regular revision procedure was carried out according to the *Rulebook on the Procedure of Adopting New and Revisions of Existing Study Programmes* (No. 01-993-1 / 22). It stipulates that the Committee coordinates a revised curriculum. The Committee also includes student representatives and external users, and the Scientific - Teaching Council of the organizational unit submits their proposal to the University Senate for adoption.

In order to involve all stakeholders in the process of improving the study programme, a public discussion was held on March 14, 2023 (No. 01-I-374/23). Stakeholders and the public were informed about the public discussion via the School's website and by e-mail. The materials for the public discussion were available in advance to heads of individual Chairs, heads of courses, teachers, students and external users. On the basis of the public discussion and the conclusions reached, the Minutes of the public discussion were drafted (No. 01-450/2).

On top of the conclusions of the public discussion, when deciding on the type of changes, the relevant data of the annual report at the level of the organizational unit of the School of Medicine and the study programme Medical Studies in English (No. 01-I-2216-c/21) of December 20, 2021, adopted at the session of the Scientific - Teaching Council on December 17, 2021.

Furthermore, when deciding on the type and extent of changes, suggestions for improvements on the basis of earlier evaluations were also analysed - the last institutional accreditation from 2020 (dated January 23, 2020; No. 05-03-40-92-8/19), and the accreditation of study programmes carried out by AZVO (Certificate of Reaccreditation of AZVO of the University of Mostar (No. 355-01-18-0028 dated May 9, 2018). The application of the provisions of legal and internal acts on the minimum share of pre-examination requirements in the final grade in all courses was also taken into account, as well as the application of modern teaching methods with the student in the centre of the teaching process. In relation to the above, different teaching methods are used that support interactive learning and research, problem solving, and creative and critical thinking. Improvement of the Syllabi encourages different ways of teaching in accordance with the planned learning outcomes, and is achieved on the basis of evidence on achieving the prescribed learning outcomes (e.g. student tests, seminar papers, presentations, etc.).

The School of Medicine of the University of Mostar is a member of the Dean's Conference of Schools of Medicine in the Republic of Croatia. The learning outcomes implemented in this programme hence were adopted in collaboration with Schools of Medicine in the Republic of Croatia and as such correspond to the level of CQF (Croatian Qualification Framework) and EQF (European Qualification Framework). The prescribed learning outcomes clearly define, that is, result in the competencies that students, future doctors of medicine, should acquire during their studies, and which are necessary for entering the labour market, continuing education or other needs of the individual/society. Recommendations of professional associations that monitor their licensing (for example, Medical Chambers) were also accepted, with the aim of educating experts who are competitive on the national and international labour market.

The revised curriculum has complied ECTS credits with the actual student workload based on feedback from participants in the teaching process. Accent lies on achieving clear and accessible criteria and methods of evaluation and assessment of students, in order to make the examination process more transparent, and the students were familiar with expectations of them even before the start of a particular course.

Conclusions were reached through conversations with the students, that they were satisfied with the possibility of performing elective summer rotations in internal medicine and surgery, in different institutions and with the possibility of choosing the department in which they would perform the rotation. This especially applies to the fact that they can work in smaller groups.

In relation to the above, the new curriculum also made a major intervention in the sense of transferring all clinical rotations to the 6th, final year of studies and their organization in the form of student rotations, which is described in more detail below. By doing so, lesser workload for individual Clinics in a single rotation is achieved, and the students will be able to work in smaller groups, which significantly increases their engagement in exercises.

In addition, during the development of the curriculum, all strategic tasks in the strategic area of education from the *University Development Strategy 2018 – 2023*, which relate to the curriculum and teaching process, were carried out (more in the chapter "3.1. Link to the University Development Strategy").

Taking all of the above into account, several changes have been made in this revised curriculum in comparison to the existing one. The key changes (introduction of new courses and reorganization of internships or clinical rotations) are described in the text below, while minor changes in the form of changes in course names, corrections of time schedule and ECTS credits are presented in a table with a short explanation.

1.1. New Courses

Back in the previous revision of the programme, numerous new courses were introduced, as follows:

- Personalized Medicine and Biotechnology
- Transfusion and Transplantology
- Medical Statistics
- Clinical Pharmacology

Introduction of these courses proved to be a good decision since the students were satisfied with the classes and the skills they acquired in these courses, which was also reflected in the excellent grades in student surveys.

Medicine is an extremely fast changing field. The literature and materials from which the people who developed this new programme studied when they were students are, in a practical sense, outdated. On top of this, pathology and incidence of certain diseases are changing, and the number of possible tests is increasing day by day. The incidence of serious diseases such as cancer is also increasing. Taking all of the above into consideration, and through comparisons with the programmes of referential Schools in the region (primarily those from the European Union), three new courses were included in the new programme. The mentioned courses are already in the programmes of reference Schools of Medicine in the EU, and some of them were taken by doctors of medicine in EU countries for the purpose of diploma acknowledgment. The introduction of these courses reduces the differences of our programme in comparison with the programmes of EU countries (primarily the Republic of

Croatia), which will facilitate the evaluation process of our diplomas and the possibility of mobility of doctors of medicine after graduation.

a. Clinical Biochemistry

The goal of introducing the course Clinical biochemistry is to achieve students' understanding of the functioning of the organism at the molecular level, which is reflected in the normal functioning of organs, as well as in pathological biochemical processes in the organism, the role of natural biomolecules in the body, the dynamics of the synthesis and breakdown of natural biomolecules (hormones, tumor markers, vitamins, trace elements) and their influence on the functions of the main organ systems. Also, the goal is to train students for critical judgment of laboratory results in different diseases.

b. Palliative Medicine

The goal of introducing this course is to improve and advance students' knowledge of the concept and organization of palliative care, the role of palliative care for patient and family, and health care of the leading symptom of a palliative patient - pain, as well as other symptoms that may appear.

In addition, students will be enabled to communicate with terminally ill patients and their family members, while raising awareness of the need for responsible decision-making within ethical frameworks.

c. Health Care Organization and Health Economics

The goal of introducing this course is to expand students' knowledge about the structure of health systems and the organization of health care. The idea is to enable students understand the fundamentals of health economics and ways of funding the health systems, and to make students aware of the need for an active approach regarding the acquisition of such skills as management, teamwork and planning at different levels of the health system.

1.2. Reorganization of Clinical Rotations

Clinical rotations, i.e. student practice, will be organized in the form of student rotations at 4 Clinics - Internal Medicine, Surgery, Gynecology and Pediatrics. The expected total duration is 12 weeks, 3 weeks for each rotation respectively. The time schedule of exercises has been increased by 25%.

1.3. Changes in Course Names, Time Schedule, ECTS Credits and Other

A detailed description of all changes is presented in table 2 of the Report of the Committee for the revision of the Medical Studies in English curriculum, which is attached to this Curriculum.

2. GENERAL INFORMATION ABOUT THE STUDY PROGRAMME

Study programme:	Medical Studies in English
Cycle:	Integrated study programme (1 st and 2 nd cycle)
Туре:	University study programme
Scientific area:	Biomedicine and Health Care
Scientific field:	Basic Medical Sciences
	Clinical Medicine
	Public Health
Academic title:	Doctor of Medicine (MD)
EQF qualification level:	7
Duration of the study	6 Years, 12 Semesters
programme:	
ECTS:	360
Language:	English
Mode of study:	Full-time
Awarding institution:	University of Mostar
Institution administering	University of Mostar, School of Medicine
study programme:	
Study programme	1. Achieve an adequate student knowledge on scientific foundations
objectives:	of medicine and train them to differentiate and apply various
	scientific methods, including principles of biological function
	measurements, validating scientifically proven facts, and analysing
	scientific data.
	2. Achieve an adequate student knowledge on recognizing and
	connecting the structures, functions, and behaviours in healthy and
	sick individuals, as well as influence of socioeconomic environment
	on human health.
	3. Prepare the students to critically evaluate and apply the
	procedures that enable doctors of medicine a comprehensive input
	on mental and physical disturbances, on preventive medicine,
	diagnostics and treatments, as well as human reproduction.
	4. Prepare the students to critically judge, select and rationally apply
	preventive measures, as well as diagnostic and therapeutic
	algorithms according to relevant guidelines on disease prevention,
	health status improvement, or a complete resolution of the disease.
	5. Train the students in appropriate communication skills with
	members of their medical teams, patients and their families, other
	healthcare and non-healthcare professionals, regulatory agencies
	and public, according to appropriate legislature and ethical principles
	6. Achieve an adequate student awareness on necessity of life-long
	learning in the field of medicine and biomedicine and health in
	general
Study programme	Upon completion of Medical Studies in English at the School of
competencies:	Medicine of the University of Mostar doctors of medicine acquire the
	following competencies:
	• fundamental theoretical knowledge and practical skills that are
	necessary for independent work in a doctor's office, correct
	determination of diagnosis and treatment,

• broad knowledge and practical skills that qualify them for any type
of postgraduate education and cooperation with other healthcare
professionals,
• professional and scientific education that enables a fundamental
approach to the creation of scientific and professional thinking.
• knowledge about the process of scientific research work and the
ability to critically evaluate old and new scientific knowledge
a correct othical and doontological attitudes
• correct ethical and deontological attitudes,
• knowledge of the correct use of medical information, respect for
patient privacy, professional secrecy, empathy towards the patient
and acceptable communication with the patient,
• the ability to communicate with the patient in a way that is
comprehensible to him while respecting the patient's right to
participate in treatment decisions or to refuse treatment,
• acquire knowledge for further improvement and development of
medicine, systematic thinking and structural approach to medical
problems,
• acquire a systematic way of thinking and a structured approach to
medical problems during their education, as well as knowledge about
the diagnostic algorithms and making therapeutic decisions,
• legal requirements for working in the medical profession while
assuming the responsibility associated with the title of doctor of
medicine.
 knowledge about the functioning and organization, as well as the
financing of health care methods of keeping health records and
knowledge about legal standards in relation to permanent theoretical
and practical training
 knowledge of how to approach a psychiatric patient respecting all
bis particular poods, and are ready to dedicate themselves to the
ms particular needs, and are ready to dedicate themselves to the
medical profession and take responsibility for the patient's physical,
mental and social well-being,
• knowledge of now to provide appropriate medical services to
children,
• knowledge of the concepts of health promotion and disease
prevention,
 acquire knowledge of how to cooperate with other health
professionals, achieve successful teamwork, teach colleagues and
develop personal teaching skills,
• acquire knowledge about quality assurance measures and assess
their own competence in the field of medicine and knowledge
standards,
• they are familiar with the harmful effects of ionizing radiation, and
methods of protection,
• acquire knowledge about anesthetizing pain in different anatomical
regions,
acquire basic medical knowledge in order to be able to provide help
in all cases of medical emergency and master the diagnostic
algorithms
acquire knowledge for intervention in the event of a medical
amergency and the implementation of proventive protection
monocuración modicino
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	 be prepa decisions. 	red to take responsibility and make the necessary medical						
	 be prepa 	red and capable of establishing successful teamwork and						
	skill manag	gement,						
	• be prepared to consider changes in the socioeconomic context of treatment							
	 be awa 	re of and ready for lifelong continuous learning and						
	improvem	ent in order to maintain a high level of medical						
	competend	ce.						
	A detailed	d list of specific knowledge and skills, as well as						
	recommen	ded levels of competence for the performance of each						
	skill, are pr	esented for each course in the "Clinical Skills Booklet".						
Study programme learning	IU-MSE1.	Explain and relate knowledge from the basic natural and						
outcomes:		medical sciences to apply a scientific approach to solving						
	IU-MSE2.	Describe and relate knowledge about the normal						
		structure and function of organs, organ systems and the						
		body as a whole.						
	IU-MSE3.	Describe and relate knowledge about molecular,						
		biochemical and cellular mechanisms important in						
		Explain the abnormal structure and function of organs						
	10-101524.	organ systems and the body to evaluate and argue the						
		causal relationship between internal and external factors						
		and the individual's behaviour.						
	IU-MSE5.	Describe the various causes of diseases (genetic,						
		developmental, autoimmune, degenerative, toxic,						
		metabolic, and neoplastic) and the disease mechanisms.						
	10-101520.	clinical manifestations of diseases and apply it in the						
		diagnosis and treatment of diseases.						
	IU-MSE7.	Identify the importance of scientific methods in basic,						
		translational and clinical research.						
	IU-MSE8.	Connect and apply knowledge about clinical, laboratory						
		interpret and conclude in terms of differential diagnosis						
	IU-MSE9.	Assess the functional forms and content of						
		interdisciplinary cooperation and apply good practice of						
		participating in multidisciplinary teams at all levels of						
		health care, implementing and designing public health						
		projects and campaigns, and in scientific research.						
	IU-MSE10.	Evaluate and apply the protocols and algorithms of						
		according to current guidelines for the treatment of						
		diseases and maintenance of health.						
	IU-MSE11.	Assess and review the rationality and safety of therapy						
		based on knowledge and evidence that contribute to						
		medical care, treatment outcomes, and health						
		maintenance.						
	10-1013E12.	medical practice, medical ethics, and deontology.						

	IU-MSE13.	Assess and argue the importance of socioeconomic.
		psychological, environmental and other non-biological
		determinants that contribute to the maintenance of
		health and/or disease development
	III-MSF14	Conduct a medical interview comprehensive history-
	10-1013214.	taking and physical examination to obtain information
		relevant for working and differential diagnosis
		Develop on oppropriate plan for management inclusion
	IU-IVISEIS.	Develop an appropriate plan for management, inclusion
		and rational selection of laboratory and instrumental
		examinations, interpretation of their results, and
		Interventions for disease diagnosis and treatment.
	IU-IVISE16.	Practice effective communication with patients and their
		families when presenting and explaining medical
		information in accordance with the patient's and family
		members' level of health literacy and with the patient's
		consent.
	IU-MSE17.	Explain the content of informed consent and argue for the
		reason informed consent should be obtained for the
		diagnostic and therapeutic methods necessary for patient
		treatment procedures.
	IU-MSE18.	Formulate and explain health information on the
		disease/diagnosis to other healthcare and non-healthcare
		professionals, regulatory agencies, and the interested
		public in an appropriate manner and in compliance with
		applicable regulations.
	IU-MSE19.	Apply specific forms of digital personal communication
		with the patient to identify the need for therapeutic
		interventions, report side effects and meet other medical
		needs.
	IU-MSE20.	Apply and develop educational and information content
		and forms of telemedicine.
	IU-MSE21.	Apply learning methods that enable postgraduate
		specialist training, lifelong learning and doctoral
		education in the field of biomedicine and health.
Opportunities after	Upon com	pletion of Medical Studies in English, the following is
graduation:	possible:	
	1. Take the	professional/state exam and, after passing it, perform the
	duties of a	doctor of medicine.
	2. Continue	e studying at the post-graduate doctoral study (3rd cycle)
	and/or pos	st-graduate specialist study
	3. After me	eeting the other criteria, apply for residency
Accreditation:	The Unive	ersity of Mostar received a Decision on Institutional
	Reaccredit	ation on January 14, 2020 (No. 05-03-40-92-8/19) from the
	competent	Ministry of Education, Science, Culture and Sports of
	Herzegovir	na-Neretva Canton on the recommendation of the Agency
	for Develor	oment of Higher Education and Quality Assurance of Bosnia
	and Herze	govina, after which the University was registered in the
	State Regis	ster of Accredited Higher Education Institutions.
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3. BASIC CHARACTERISTICS OF THE STUDY PROGRAMME

3.1. Connection with the Development strategy of the University of Mostar

In the Development Strategy of the University of Mostar 2018 - 2023, in the strategic area of education, several strategic goals are related to the curriculum and its elements. In objective 1, it is defined that the University, in cooperation with stakeholders, will create, approve, implement and continuously monitor and improve study programs at all levels, with clearly defined learning outcomes related to the needs of the labor market, and in accordance with the European Qualifications Framework (EQF), define the goals and expected learning outcomes of each study program and harmonize the content of the study program with them, in accordance with the appropriate level of the European Qualification Framework and the gualification standard, and to introduce a transparent and consistent process of revision and improvement of study programs with the participation of students and other stakeholders, ensure a realistic allocation of ECTS points, through the defined system of ECTS coordination at all levels of study, to improve the interdisciplinary nature of study programs by enabling the optionality of courses at the University level. Objective 3 refers to the development of a network of teaching bases, that is, organizations from different fields of activity, and to the establishment of cooperation that will enable the connection of practice, science and art, and higher education. In this sense, the goal is to increase the number of hours and the share of teaching practice in study programs and the share of ECTS points that are acquired through professional practice, and to increase the number of Diploma (graduation) theses that have a topic and content related to clinical practice.

3.2. Compliance with the Achievements of a Certain Scientific/Artistic Area and Labour Market and Connection with the Standards of Occupations/Qualifications

Objectives, competencies, and learning outcomes at the level of the study programme are defined in a way that is in line with the achievements of a particular scientific area and labour market and related to the standards of occupations/qualifications. The Employment Office regularly publishes a list of study programs in demand on the labour market for each individual calendar year. Medicine is often highly ranked on the scale of the so-called deficit professions, but the School of Medicine in Mostar is extremely careful in planning enrolment quotas and defining strategic development and management goals. Without harmonizing the fundamental principles of responsible and rational business, and the strategic support of the founder of the University of Mostar, the School of Medicine cannot respond to market challenges without satisfying the fundamental postulates of responsible management, which is the optimization of personnel, space and equipment, after which it would only be possible to comply with the request for an increase in enrolment quota at the School. In accordance with the aforementioned, enrolment quotas were not increased in the Medicine study program.

To harmonize with the achievements of the scientific/artistic area, the representatives of teachers in the Committee for the development of the revised curriculum and other teachers who participated in the development of syllabi for each course took into account current achievements and trends in scientific area of biomedicine and health, field of basic medicinal

sciences, clinical medical sciences and public health, and related branches according to Frascati classification for each study programme).

Also, student representatives and external users were appointed to the Committee for the development of the revised curriculum to harmonize with the labour market. Public hearing was organized with the participation of experts from practice and economics (representatives of public health institutions, representatives of teaching bases, health centres, and general hospitals in FBiH)), and their suggestions were taken into account in the development of the curriculum.

Since no occupational standard or qualification standard has been defined at any level in BiH, the following documents have been taken into account:

- Decision on the standard classification of occupations in the FBiH (Official Gazette of the FBiH, Vol. XI, No. 40, No. 8, 2004), which lists occupations under the category "Class 2. Experts and Scientists" as medical doctors (code 2221.01)and its activities include health promotion, disease prevention, disease detection, patient treatment and medical rehabilitation.

In addition to the above document, the following documents were also considered:

- EU Directive 2005/36/EC in accordance with the framework of EU member states with which best practice examples are exchanged with the aim of realizing the ideas of lifelong learning and mobility, increasing the quality and efficiency of education and training, promoting fairness, social cohesion and active citizenship, and strengthening creativity, innovation and entrepreneurship.

Jobs/competencies/learning outcomes from all the above documents are implemented in the competencies and learning outcomes at the level of the study programme listed in chapter "2. General information about the study programme". They are realised in obligatory courses, in order to ensure that all students achieve them with the acquired qualification. The coverage of these learning outcomes at the level of the study programme with the learning outcomes at the level of obligatory courses is presented in the chapter "3.12. Matrix of learning outcomes" and all with a goal to accelerate the transformation of the open and inclusive higher education system in Europe.

3.3. Comparability with the Study Programmes in the Country and Abroad

The curriculum is comparable to: study programs in the countries of the European Union, especially with the neighbouring Republic of Croatia. The corresponding ECTS credits are based on the principle of well-balanced curricula and qualification standards, focusing on acquiring knowledge, practical work and mastering the basic, clinical and public health skills of medical doctors. The study program of medical studies is related to accredited programs in EU countries, for example, it is completely related to the study of medicine at the School of Medicine of the University of Split, Zagreb, Rijeka and Osijek. Compliance with similar study programs in Bosnia and Herzegovina overlaps in about 70% of the curriculum. Comparability is reflected exclusively in the competencies and learning outcomes at the level of study programmes and in the duration of studies, while the study programme retains its specifics mainly through the structure, course names, and ECTS credits.

3.4. Openness to Student Mobility

Student mobility is defined by the *Rulebook on international mobility*, which refers to administrative support for students, student mobility documents, insurance, method of

application, the procedure for recognizing mobility and information package. The unique recognition methodology is defined at the university level by the Senate Decision on the adoption of a single form for the *Decision on recognition of courses, ECTS credits, grades, and professional practice during student mobility*, which is recorded in the diploma supplement. Students can find information on mobility programmes and accompanying forms on the University's website and through vice-dean for international cooperation and coordinator at the organizational unit that forwards information from the International Relations Office to student representatives.

In the past period, special attention was paid to the outgoing mobility of students, through the signing of bilateral and multilateral agreements and mobility programs within the framework of the ERASMUS+ program. All available information about mobility is available to students on the respective websites of the School of Medicine and University of Mostar, while any additional ambiguities can be resolved with the help of the coordinator for the ERASMUS+ program. The importance of mobility is also reflected in the fact that the University has established an Office for International Cooperation, which implements mobility programs for staff and students, and coordinates all activities related to international cooperation. Also, the mobility websites in Croatian and English have been updated. Furthermore, students and staff are regularly informed about all mobility opportunities, as well as newly signed agreements, and informal meetings were organized where exchange experiences were shared. Exchange experiences are regularly published on the social networks of the School of Medicine and University of Mostar.

3.5. Conditions for Enrolment in the Study Programme and Transfer from other Study Programmes

The *Rulebook on Study of the University of Mostar* defines the right to enrol in undergraduate, graduate, and integrated study programmes, which is done through a public competition. The Senate, at the proposal of the Scientific - Teaching Council of the organizational unit, and with the consent of the Governing Board of the University and the competent Ministry of Education, Science, Culture and Sports of Herzegovina Neretva Canton, announces a public tender. It is published on the website and bulletin board of the School of Medicine of the University of Mostar, which contains information on the conditions for enrolment, entrance examination, tuition fees, criteria for selecting candidates, and other information.

Conditions for enrolment in the MSE study programme:

- Completed secondary education or equivalent from the country where the education was acquired (overall average over the continuum of all 4 years of the secondary school education comprising all the grades, together with the specific evaluation of grades in Biology, Chemistry and Physics).

- Psychophysical abilities to study medicine.

The entrance examination is not conducted. The School committee will conduct an interview with applicants and create a ranking list of candidates who meet the admission criteria.

When transferring from other study programmes, a request is submitted to the Dean of the School of Medicine of the University of Mostar, and the Teaching Committee gives a proposal on the possibilities and conditions for enrolment, while the final decision is made by the dean.

3.6. Conditions for Enrolment in the Next Semester and Year of Study and Graduation

Conditions for enrolment in the next semester and higher year of study are defined by the *Rulebook on Study* of the University of Mostar and the Rulebook on the Integrated Studies at the School of Medicine of the University of Mostar, as well as by decisions on amendments to the Rulebook.

The conditions for enrolment in the next semester and year of study are complied with the requirements of the study programme, they are clear, published and consistently applied.

To enrol in a higher year of study, a student must attend and pass all courses from the current year. Certain deviations from this rule are possible when transferring from other Schools of Medicine.

The study programme ends with writing and defending a Diploma Thesis that carries 3 ECTS credits and is evaluated as described in the appropriate course syllabus.

The manner and procedure of defending the Diploma Thesis and the methodology of its preparation are defined in the *Rulebook on Writing and Defending a Diploma Thesis of the School of Medicine of the University of Mostar* and other appropriate materials available on the School's website (roadmap, instructions for writing the thesis, outline of the thesis, instructions for ethical permission, etc.).

At the end of the study programme, students receive appropriate documents (diploma and diploma supplement). The diploma and the diploma supplement are issued in accordance with the relevant regulations. The School of Medicine issues a diploma supplement in Croatian and English.

3.7. Organization of Study Programme

The study programme is organized through two semesters in the academic year, and classes are conducted according to the schedule of classes through shifts.

The programme lasts 6 years (12 semesters) and includes basic and clinical medical courses, public health, as well as clinical rotations that integrate previously acquired knowledge and skills. The academic year lasts from the beginning of October to the beginning of July, so that the prescribed number of hours of the programme (5690) could be performed without breaching the recommendation that a student does not have more than 25-30 hours of direct teaching in a single week.

During the six years of study at the study programme Medical Studies in English, active teaching and independent student work (10,800 hours) are achieved. The independent student work (5110 hours) includes the time the student needs for independent study, preparation of seminars, preliminary examinations, final tests, notwithstanding contact hours with teachers (lectures, seminars and exercises). The number of hours of independent work is defined in the description of the content of each course. The method of checking the acquired learning outcomes, as well as the percentage value of individual forms of checking the knowledge, are specified in the description of each course (written, oral, practical check). Attendance of classes is obligatory, while absences and consequences thereof are regulated by the *Rulebook on the Integrated Studies at the School of Medicine of the University of Mostar*.

Examinations are organized in the form of a partial (preliminary) examination in a particular course and a final examination. Forms of checking the knowledge can be only oral, only written (tests), tests combined with an oral examination, tests combined with a practical knowledge test and an oral examination.

The pre-term or the post-class term is scheduled after the end of classes (tournament or block), after a few days off (including weekends and holidays). This interval is determined in proportion to the length of the block of the course to which it refers. Summer and autumn examination terms are scheduled in July and September respectively (usually two examination dates for each course in both summer and autumn). In the fourth and eighth examination term, students take their examinations before the Examination Panel.

On top of this, the curriculum of each course defines the possibility of online classes, although in accordance with the decisions of the University and the School of Medicine, traditional "live" teaching is preferred and encouraged. The maximum number of hours of online classes at the level of the study programme is 20%.

During the 6th year of studies, clinical rotations are held as a form of professional practice, and are described in more detail in the structure of the study programme (3.8.)

3.7.1. Student organizations, associations and sections at the School of Medicine, University of Mostar

In addition to the prescribed curriculum, tuition in a somewhat informal format is available to students through the activities of student organizational units. By fulfilling the assignments within the programs of individual unit, students may improve their skills of communication, organization, time and resource management, as well as social skills which are known to be crucial for successful work experience.

PULS

Journal of medical students at School of Medicine, University of Mostar – PULS, was founded in 2004. on students' initiative. PULS provides a platform that enables students to develop creativity, originality, ingenuity, and wit. By writing texts on a given topic, students learn to retrieve information from reliable sources, to discern important information and to compose them in a meaningful content. The subject matter is often diverse and includes scientific, medical, and non-medical issues, students' opinions, and attitudes as well as teaching staffs' and interviews with inspiring individuals. By collaborating with other students' magazines, PULS also enables the exchange of experiences and the creation of new student networks.

Association of Medical Students of Bosnia and Herzegovina - BoHeMSA

Bosnian and Herzegovinian Medical Students' Association - BoHeMSA is a non-governmental, non-profit, student organization whose membership consists of students from 4 medical faculties in Bosnia and Herzegovina: Mostar, Sarajevo, Tuzla and Zenica. It is a branch of the International Federation of Medical Student Associations (IFMSA) - a dynamic platform that, in addition to representing medical students and doctors worldwide, also provides opportunities for personal, professional, and social development of its members. The main

activities of BoHeMSA are collaboration between students, representation of students and combining interests of medical students both at the national and international level. BoHeMSA carries out its activities through six active working sectors - Sector for Public Health (SCOPH), Sector for Medical Education (SCOME), Sector for Human Rights and Peace (SCORP), Sector for Sexual and Reproductive Health and Rights including HIV and AIDS (SCORA), the sector for scientific-research exchanges (SCORE), the sector for professional exchanges (SCOPE), which in turn operate through local organizational units.

Student section for pharmacology and immunology – PHARMiON

PHARMiON is the first scientific student section founded at the University of Mostar School of Medicine. Membership consists of medical students, pharmacy students and students of Faculty of Health Studies. Scope of the student section covers the areas of basic and clinical pharmacology with toxicology, basic and clinical immunology, rheumatology, and scientific work. The main goals of the student section are to provide additional education in the mentioned areas, to provide additional clinical practice, to encourage students to do scientific research as well as write and publish scientific publications, to organize scientific meetings and to encourage students to participate in congresses. By collaborating with other students' sections and organizations, PHARMiON enables to create a unique network of biomedical students for exchanging knowledge and experience, and to create a friendly atmosphere between the future pillars of the health system.

Student Section for Emergency Medicine

The student section for emergency medicine is an informal group of students at School of Medicine, University of Mostar. Founded in 2019, the section successfully gathers medical students, pharmacy students and students of Faculty of Health Studies. Annual projects of the section include "Practical skills at EMC", "Save the heart - get moving", First aid education for students and teachers at Mostar high schools, Sanus Motus running school, and Sportikus sports association. The aim mentioned projects is to teach students the algorithm of actions in the event of an accident, to teach how to administrate first aid, to improve the administration of CPR and the Heimlich maneuver, as well as to take care of fractures, burns, and foreign bodies, all through education and demonstration exercises. Also, by carrying out public health actions in collaboration with the partners of the section, an additional goal is to raise awareness among the citizens of the city of Mostar about the importance of knowing how to properly administrate first aid and adopting healthy lifestyle habits.

Student section for surgery - SSS

The student section for surgery was founded in 2019 on the initiative of medical students motivated to acquire new and expand and establish existing knowledge and skills in the field of surgery. Students of Medicine, Dental Medicine and Medical Studies in English are entitled to membership in the section. The section consists of mentors, leadership, and members of the section. Section is based on the volunteer work of medical doctors (mentors) who pass on their knowledge to the students who make up the leadership of the section, who in turn pass on the acquired knowledge and experience to members of the section. The section focuses on practical work in the form of surgical suturing and knotting, instructing on how to approach a patient, wound care and on providing lectures with specific surgical topics. The main goal of

the section is to enable students to improve existing knowledge and acquire new knowledge and skills with the aim of facilitating the start of work after graduation and contributing to the competence and self-confidence of young doctors.

Student Section for Dental Medicine - SSDM

The Student Section of Dental Medicine was founded in 2020 with the aim of bringing the everyday clinical practice of a Doctor of Dental Medicine closer to students and enabling extracurricular training of certain clinical procedures. By organizing workshops such as "Instruments 101", "How to take impressions", "How to apply rubber dams, clamps and matrices", "Orthopantomography analysis", "Dentition type differentiation on study models" etc., students can practice and independently improve manual skills that come as part of the protocol of clinical procedures that they previously did not improve individually during the regular classes. In addition, the section strives to raise awareness of oral hygiene among fellow citizens by organizing visits to kindergartens and schools on Oral Health Day.

3.8. Structure of the Study Programme

The structure of the study programme is reflected in the number of hours of each type of teaching and teaching in total, the number of hours of practice, and the number of hours of independent student work in the total student workload of 360 ECTS credits, or 10800 hours of work (table 3.8.1 and 3.8.2).

In the first two years of study, the student is acquainted with the medical profession (introduction to medicine), fundamentals of scientific research, medical informatics and the way of studying medicine, as well as the physical, chemical and biological foundations of life, structure and function of the human body (anatomy, histology and embryology, physiology, biochemistry, etc.), with recent knowledge about the molecular mechanisms of diseases, along with a psychological approach to the patient and fundamentals of the Croatian language.

In the third year, mechanisms of diseases, pathogens (pathology, pathophysiology, microbiology), types and manner of drugs effects (pharmacology), and approach and method of examining patients (clinical propaedeutics) are studied.

The fourth, fifth and sixth year of study incorporate clinical courses. Diseases, their prevention, diagnosis, suppression and treatment, as well as rehabilitation of damages that may remain after them, are studied.

Students spend most part of their sixth year on clinical rotations ("internships"). Clinical rotations are a new and modern form of training which basically replaces the former internship with the goal that students in their final year of study gain experience in independent work as a doctor. In frames of rotations, the student integrates acquired knowledge and skills, and applies them in daily work on concrete patients. The rotation assumes that the student follows the mentor in his/her work and responsibilities full time. In order to achieve this type of relation, students are allocated to different departments and "rotate" among them after completing their practice.

According to the *Rulebook on the Procedure for Adopting New and Revisions of Existing Study Programmes* (No. 01-993-1/22), only obligatory courses are listed in the curriculum, while electives are adopted in the annual study plan for each academic year. However, in our programme, the number of elective courses per semester/year and their structure are predefined and therefore the table shows the number of hours of each type of teaching and teaching in total, the number of hours of practice, and the number of hours of independent work including both obligatory and elective courses (table 3.8.3).

In relation to the total number of ECTS credits, a sum of ECTS credits acquired in elective courses is 17, and the student can choose a total of 12 elective courses. Besides obligatory and elective courses at the level of the study programme, in addition to 30 ECTS credits per semester, a student can choose university elective courses from the list adopted by the Senate each academic year, which are recorded in diploma supplement.

The decision to introduce elective courses emerged in terms of adapting the curriculum to European universities. Elective courses were introduced in order for students to have the opportunity to become acquainted with certain medical courses better and thus deepen their medical knowledge in the area of interest. The purpose of elective courses at the study programme level is a more detailed elaboration of learning outcomes already acquired in obligatory courses but following student preferences. The purpose of university elective courses is to acquire competencies not provided by the study programme, but that can help students achieve competitiveness in the market and contribute to building one's personality through education.

In addition to the courses provided in the curriculum, students have the opportunity to complete two summer clinical rotations during their studies - Internal Medicine Summer Rotation and Surgical Summer Rotation. They include 120 hours each, or 3 working weeks. Many elements of these rotations are left to the student's discretion - the student chooses the time of the rotation, the mentor, and even the institution where to perform it, with a recommendation of the tasks listed in the summer rotation forms.

In frames of the Summer Internal Medicine Rotation, the student spends 80 hours (2 working weeks) in one of the departments of internal medicine, while the remaining 40 hours (1 working week) can be spent in one of the other internal medicine departments that he is acquainted with in the 4th year of study, at their own discretion (infectology, dermatology, neurology or anesthesiology). In frames of the Summer Surgical Rotation, the student spends 80 hours (2 working weeks) in one of the surgical departments, while the remaining 40 hours (1 working week) can be spent in one of the other surgical departments that he is acquainted with in the 5th year of study, at their own discretion (otolaryngology, maxillofacial surgery, ophthalmology or orthopedics). Both rotations can be performed outside the teaching bases of the School, and student mobilities are also recognized if their programmes are similar to the above mentioned rotations.

Type of instruction	1. year	2. year	3. year	4. year	5. year	6. year	In total	%
Lectures	265	251	270	275	308	150	1519	14.06%
Seminars	263	316	259	233	258	265	1594	14.76%
Exercises	272	213	296	482	444	870	2577	23.86%
Independent work	1000	1020	975	810	790	515	5110	47.31%
In total	1800	1800	1800	1800	1800	1800	10800	100%

Table 3.8.1 Review of teaching load, hours of theory and practice and share in load

Table 3.8.2 Share of workload in programme considering theoretical and practical teaching

Type of load	Number of hours	Share %
Theoretical teaching	3113	54.71%
Exercises / practical work	2577	45.29%
In total	5690	100%

Table 3.8.3 Structure of the study programme including certain types of teaching, practice and independent work

				Yea	r of study: 1				
				S	emester: I				
Course	Course title	Hours	s of teac	hing	Ι.	П.	III.	Workload	
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS
					in total	practice	work	total	
								(I.+II.+III.)	
MFMSE101	Medical								
	Physics and								5.5
	Biophysics	24	20	16	60	0	105	165	
MFMSE102	Medical								95
	Biology	45	30	35	110	0	175	285	5.5
MFMSE103	Introduction to								
	Medicine and								4
	History of								-
	Medicine	44	15	31	90	0	30	120	
MFMSE104	Scientific								7
	Methodology	24	46	30	100	0	110	210	,
MFMSE105	Medical Ethics	20	0	25	45	0	15	60	2
MFMSE106	Croatian								1
	language I	0	0	25	25	0	5	30	T
MFMSEI01	Elective course	/	/	/	/	/	/	/	/
Ir	n total	157	111	162	430	0	440	≈ 870	29
ECTS for obli	gatory courses								29
ECTS for elec	tive courses								1
ECTS IN TOTA	AL								30

Year of study: 1													
Semester: II													
Course	Course title	Hours	s of teac	hing	Ι.	١١.	III.	Workload					
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS				
					in total	practice	work	total					
								(1.+11.+111.)					
MFMSE201	Medical												
	Chemistry and								7.5				
	Biochemistry I	32	26	22	80	0	140	220					
MFMSE202	Physical								0.5				
	Education I	0	25	0	25	0	0	25	0.5				
MFMSE203	Anatomy	60	90	65	215	0	415	630	21				
MFMSEI02	Elective course	/	/	/	/	/	/	/	/				
In	n total	92	141	87	320	0	555	≈ 875	29				
ECTS for obli	gatory courses								29				
ECTS for elec	tive courses								1				
ECTS IN TOTA	4L								30				

					Year of study:	2							
Semester: III													
Course	Course title	ŀ	Hours of		I.	П.	III.	Workload					
code		t	teaching		Teaching,	Hours of	Independent	hours, in	ECTS				
		L	Е	S	in total	practice	work	total					
								(1.+11.+111.)					
MFMSE301	Medical												
	Chemistry and								8				
	Biochemistry II	42	34	34	110	0	130	240					
MFMSE302	Medical								2				
	Genetics	20	5	20	45	0	45	90	5				
MFMSE303	Histology and								10				
	Embryology	50	41	44	135	0	165	300	10				
MFMSE304	Basic								8				
	Neuroscience	20	24	56	100	0	140	240	0				
MFMSE305	Croatian								1				
	language II	0	0	25	25	0	5	30	1				
I	n total	132	119	164	415	0	485	≈ 900	30				
ECTS for obli	gatory courses								30				
ECTS for elec	tive courses								0				
ECTS IN TOTA	AL								30				

Year of study: 2													
Semester: IV													
Course	Course title	Hours	of tea	ching	Ι.	П.	III.	Workload					
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS				
					in total	practice	work	total					
								(1.+11.+111.)					
MFMSE401	Medical								10				
	Physiology	53	40	87	180	0	390	570	19				
MFMSE402	Medical								2 5				
	Psychology	20	20	20	60	0	45	105	5.5				
MFMSE403	Immunology	30	4	16	50	0	70	120	4				
MFMSE404	Physical								0.5				
	Education II	0	25	0	25	0	0	25	0.5				
MFMSEI03	Elective course	/	/	/	/	/	/	/	/				
MFMSEI04	Elective course	/	/	/	/	/	/	/	/				
In	i total	100	89	126	315	0	505	≈ 820	27				
ECTS for obli	gatory courses								27				
ECTS for elec	tive courses								3				
ECTS IN TOTA	4L								30				

	Year of study: 3													
Semester: V														
Course	Course title	Hou	rs of tea	ching	I.	Ш.	III.	Workload						
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS					
					in total	practice	work	total						
								(I.+II.+III.)						
MFMSE501	Pathology	70	70	70	210	0	270	480	16					
MFMSE502	Pathophysiology	45	30	60	135	0	195	330	11					
MFMSEI05	Elective course	/	/	/	/	/	/	/	/					
MFMSEI06	Elective course	/	/	/	/	/	/	/	/					
I	n total	115	100	130	345	0	465	≈ 810	27					
ECTS for obli	gatory courses								27					
ECTS for elec	tive courses								3					
ECTS IN TOTA	4L								30					

				Yea	r of study: 3				
				Se	mester: VI				
Course	Course title	Hour	s of tea	ching	Ι.	П.	III.	Workload	
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS
					in total	practice	work	total	
								(1.+11.+111.)	
MFMSE601	Medical								
Microbiology									
and Parasitology 21 44 30 95 0 145 240									
MFMSE602	Pharmacology	50	35	50	135	0	195	330	11
MFMSE603	Clinical								6
	Propedeutics	30	70	10	110	0	70	180	0
MFMSE604	Personalized								
	Medicine and								1.5
	Biotechnology	10	10	10	30	0	15	45	
MFMSE605	Social Medicine	20	7	8	35	0	25	60	2
MFMSEI07	Elective course	/	/	/	/	/	/	/	/
In total 131 166 108 405 0 450 ≈ 855									
ECTS for obli	gatory courses								28.5
ECTS for elec	tive courses								1.5
ECTS IN TOTA	4L								30

				Yea	ar of study: 4						
				Se	emester: VII						
Course	Course title	Hou	rs of tea	aching	I.	١١.	III.	Workload			
code		L	E	S	Teaching,	Hours of	Independent	hours, in	ECTS		
					in total	practice	work	total			
								(I.+II.+III.)			
MFMSE701 Nuclear											
	Medicine	15	10	5	45	1.5					
MFMSE702	Radiology	35	49	16	100	0	0 80 180				
MFMSE703	Internal								10 F		
	Medicine	65	195	80	340	0	245	585	19.5		
MFMSEI08	Elective course	/	/	/	/	/	/	/	/		
MFMSEI09	Elective course	/	/	/	/	/	/	/	/		
Ir	n total	115	254	101	470	0	340	≈ 810	27		
ECTS for obli	gatory courses								27		
ECTS for elec	tive courses								3		
ECTS IN TOTA	AL								30		

				Yea	ar of study: 4				
				Se	mester: VIII				
Course	Course title	F	lours o	f	Ι.	II.	III.	Workload	
code		t	eachin	g	Teaching,	Hours of	Independent	hours, in	ECTS
		L	Е	S	in total	practice	work	total	
								(1.+11.+111.)	
MFMSE801	Neurology	24	43	23	90	0	90	180	6
MFMSE802	Dermatovenerology	30	25	15	70	0	80	150	5
MFMSE803	Anesthesiology and								4 5
	Intensive Medicine	20	40	0	60	0	75	135	4.5
MFMSE804	Infectology with								
	Clinical								8
	Microbiology	20	65	35	120	0	120	240	
MFMSE805	Clinical								15
	Biochemistry	10	5	15	30	0	15	45	1.5
MFMSE806	Psychiatry	40	30	30	100	0	50	150	5
In total 144 208 118 470 0 430 ≈ 900									30
ECTS for obli	gatory courses								30
ECTS for elec	tive courses								0
ECTS IN TOTA	4L								30

				١	Year of study:	5					
					Semester: IX						
Course	Course title	ŀ	lours c	of	l.	Ш.	III.	Workload			
code		t	eachin	g	Teaching,	Hours of	Independent	hours, in	ECTS		
		L	Е	S	in total	practice	work	total			
								(.+ .+ .)			
MFMSE901	Surgery	50	100	50	200	0	160	360	12		
MFMSE902	Neurosurgery	7	6	7	20	0	10	30	1		
MFMSE903	Transfusiology										
	and										
	Transplantology	7	8	5	20	0	10	30			
MFMSE904	Urology	10	10	10	30	0	15	45	1.5		
MFMSE905	Pediatric Surgery	20	5	5	30	0	15	45	1.5		
MFMSE906	Clinical Oncology	5	35	10	50	0	10	60	2		
MFMSE907	Gynecology and								11		
	Obstetrics	70	70	60	200	0	130	330	11		
In total 169 234 147 550 0 350 ≈ 900											
ECTS for obli	gatory courses								30		
ECTS for elec	tive courses								0		
ECTS IN TOTA	AL								30		

				Year of	study: 5				
				Seme	ster: X				
Course code	Course title	Hours	s of tea	ching	Ι.	П.	III.	Workload	
		L	Е	S	Teaching,	Hours of	Independent	hours, in	ECTS
				-	in total	practice	work	total	
								(.+ .+ .)	
MFMSE1001	Otorhinolaryngology								
	- Head and Neck								6
	Surgery	25	40	10	75	0	105	180	
MFMSE1002	Maxillofacial								15
	Surgery	8	10	7	25	0	20	45	1.5
MFMSE1003	Ophthalmology	20	30	15	65	0	100	165	5.5
MFMSE1004	Orthopaedics and								6
	Traumatology	20	40	15	75	0	105	180	0
MFMSE1005	Physical and								
	Rehabilitation								2
	Medicine	10	20	10	40	0	20	60	
MFMSE1006	Environmental and								2
	Occupational Health	20	20	20	60	0	30	90	3
MFMSE1007	Epidemiology with								2
	Clinical Rotation	20	30	20	70	0	20	90	5
MFMSEI10	Elective course	/	/	/	/	/	/	/	/
MFMSEI11	Elective course	/	/	/	/	/	/	/	/
	In total	123	190	97	410	0	400	≈ 810	27
ECTS for oblig	atory courses								27
ECTS for elect	ive courses								3
ECTS IN TOTA	L								30

				Yea	r of study: 6				
				Se	mester: XI				
Course code	Course title	Hour	s of tea	aching	Ι.	П.	III.	Workload	
		L	E	S	Teaching,	Hours	Independent	hours, in	ECTS
					in total	of	work	total	
						practice		(I.+II.+III.)	
MFMSE1101	Medical								15
	Statistics	5	20	5	30	0	15	45	1.5
MFMSE1102	Pediatrics	50	90	60	200	0	160	360	12
MFMSE1103	Family								
	Medicine with								q
	Clinical								5
	Rotation	22	114	44	180	0	90	270	
MFMSE1104	Forensic								2
	Medicine	17	16	17	50	0	40	90	5
MFMSE1105	Palliative								1
	Medicine	8	10	7	25	0	5	30	T
MFMSE1106	Health care								
	organization								2
	and health								2
	economics	30	5	10	45	0	15	60	
MFMSEI12	Elective course	8	10	7	25	0	20	45	1.5
Ir	i total	132	255	143	530	0	325	≈ 855	28.5
ECTS for oblig	atory courses								28.5
ECTS for elect	ive courses								1.5
ECTS IN TOTA	L								30

				Yea	r of study: 6				
				Se	mester: XII				
Course code	Course title	Hour L	rs of tea E	ching S	I. Teaching, in total	II. Hours of practice	III. Independent work	Workload hours, in total	ECTS
MFMSE1201	Clinical Pharmacology	10	15	15	40	0	20	60	2
MFMSE1202	Clinical Rotation: Internal Medicine	0	100	20	120	0	30	150	5
MFMSE1203	Clinical Rotation: Surgery	0	100	20	120	0	30	150	5
MFMSE1204	Clinical Rotation: Pediatrics	0	100	20	120	0	30	150	5
MFMSE1205	Clinical Rotation: Gynecology	0	100	20	120	0	30	150	5
MFMSE1206	Emergency Medicine with Clinical Rotation	0	100	20	120	0	30	150	5
MFMSE1207	Diploma Thesis	0	90	0	90	0	0	90	3
In total 10 605 115 730 0 170 ≈ 900									30
ECTS for oblig	atory courses								30
ECTS for elect	ive courses								0
ECTS IN TOTA	L								30

3.9. The Optimal Number of enrolled students concerning space, Equipment, and Number of Teachers

Enrolment quotas are adopted before the beginning of each academic year by the Governing Council of the University on the proposal of the Senate and with the consent of the responsible ministry. According to the existing resources, the School of Medicine can enrol about 30 students in the study programme Medical Studies in English.

Students can only study as a full-time student. Full-time students are those who study according to the curriculum with full teaching hours. The students pay for their studies themselves.

3.10. Resources Required to Conduct the Study Programme

To carry out the study program, teachers from the University and teachers from appropriate higher education institutions participate in scientific-teaching activities in the appropriate scientific fields and branches for which there is a lack of domestic staff: Forensic Medicine, Environmental and Occupational Medicine, Emergency Medicine and History of Medicine. Data on the structure of the teaching staff according to title and professional training, gender and age structure, scientific research productivity, mobility and project activities of the teaching staff are regularly monitored through the bodies from the quality assurance system. The aforementioned data are processed at the level of study program, organizational unit and are published in annual reports.

Physical resources for the execution of study programs require:

- lecture halls
- computer equipment

- basic research and teaching laboratories (anatomy and histology, biophysics, physiology, pharmacology, neuroscience, molecular genetics laboratory, sleep medicine laboratory, molecular diagnostics laboratory)

- rooms for clinical exercises (Clinics, Departments and Institutes of the Mostar University Clinical Hospital, Ambulances of the Mostar Health Center).

On the basis of the signed cooperation agreements, the resources of other institutions are also used in the implementation of the study program / professional practice:

- University Clinical Hospital Mostar
- Health Center Mostar
- Institute of Public Health of HNŽ and Institute of Public Health of FBiH

3.11. Study Programme Quality Assurance System

The purpose, goal, structure, operation and areas of evaluation of the quality assurance system of the University of Mostar are defined by the *Rulebook on the Structure and Operation of the Quality Assurance System of the University of Mostar*.

According to the *Rulebook*, the quality assurance system at the University of Mostar consists of permanent bodies of the quality assurance system at the University level: the Quality Assurance and Improvement Committee and the Quality Assurance and Improvement Office. The School of Medicine is operated by the Quality Assurance and Improvement Committee,

which consists of the Vice-Dean for Academic Affairs, the Quality Coordinator, the representative of the teaching staff, the student representative, and the representative of the administrative and technical staff. The Quality Coordinator at the School of Medicine is also a member of the Quality Assurance and Improvement Committee.

The *Rulebook* defines the competencies and activities of each body from the quality assurance system. Bodies from the quality assurance system carry out regular activities defined by the *University Quality Assurance Manual at the University of Mostar*, which relate to conducting surveys and monitoring and data processing. Based on the implemented activities, annual reports are prepared at the level of the study programme, organizational unit, and the University. The annual reports include and evaluate the entire activity and all activities of the School of Medicine, which is reflected in the following:

MONITORING OF DATA ON STUDENTS - freshmen - fulfilment of quotas, structure of freshmen by status and gender, structure of freshmen by type of high school, structure of freshmen by performance in high school; students - structure of students by status and gender, passing the examinations, structure of graduated students, performance in studies and mobility of students.

MONITORING OF DATA ON TEACHING AND NON-TEACHING STAFF - structure of teaching staff by title and status, structure of teaching staff by gender and age, teaching load, scientific and research papers, mobility of teaching staff, project activities of teaching staff; structure of nonteaching staff by status, education and gender, structure of non-teaching staff by gender and age, project activities of non-teaching staff.

MONITORING DATA ON STUDY PROGRAMMES - structure of study programmes, representation of certain forms of teaching, representation of certain forms of knowledge assessment, coverage of literature in the library, structure of literature prescribed by the curriculum, infrastructure and resources.

The above mentioned annual reports are used as a source of results, analyses and conclusions which are implemented in the regular revision process for the purpose of improving the study programme.

3.12. Matrix of learning outcomes

	IU-sp	IU- MSE																				
Course title	code	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Medical Physics and Biophysics	MFMSE101	x		х				х														
Medical Biology	MFMSE102	х	х	х	х																	х
Introduction to Medicine and History of Medicine	MFMSE103							x		x	x	x	x				x					х
Scientific Methodology	MFMSE104	x						х		х										х	х	х
Medical Ethics	MFMSE105							х					х	х			х	х				
Croatian Language I	MFMSE106														х					x		
Medical Chemistry and Biochemistry I	MFMSE201	x																				
Physical Education I	MFMSE202													х								х
Anatomy	MFMSE203	x	х						х													х
Medical Chemistry and Biochemistry II	MFMSE301	x	х	х																		
Medical Genetics	MFMSE302	x		x			х	х	х	x												
Histology and Embryology	MFMSE303	x	х	x	х	х																
Basic Neuroscience	MFMSE304	x	x	x	x	x	x															х
Croatian Language II	MFMSE305														x					х		
Medical Physiology	MFMSE401	x	х	x	х				х													х
Medical Psychology	MFMSE402	x	х	x	х	х	х	х						x								
Immunology	MFMSE403		х	x	x	x			x							x						
Physical Education II	MFMSE404													x								х
Pathology	MFMSE501		х	х	х	х	х		х													
Pathophysiology	MFMSE502			x	x	x		х	x													
Medical Microbiology and Parasitology	MFMSE601	x				х					х	х				х						
Pharmacology	MFMSE602		х	x								x										х
Clinical Propedeutics	MFMSE603	x					х	х	х						х	х	х	х				

Personalized Medicine and Biotechnology	MFMSE604	x	x	x		x	x	x					x									
Social Medicine	MFMSE605				х	х				х		x	х	х			х	х	х	х		х
Nuclear Medicine	MFMSE701	х							x		x	х										
Radiology	MFMSE702	х							x		x							х			x	
Internal Medicine	MFMSE703						x		x		x	х			х	x		х				
Neurology	MFMSE801		x		x	x			x		x				x	x						
Dermatovenerology	MFMSE802	х	x		x	x	x		x						х	x					x	
Anesthesiology and Intensive Medicine	MFMSE803	x	x	x	x	x	x		x		x	x				x						
Infectology with Clinical Microbiology	MFMSE804				x	x	x		x		x	x										
Clinical Biochemistry	MFMSE805					x			x							x						
Psychiatry	MFMSE806	х					x		x	х	x				х	x						
Surgery	MFMSE901	х			x						x	x			x			x				
Neurosurgery	MFMSE902				x		x		x		x	x				x					x	
Transfusiology and Transplantology	MFMSE903	х	x	х	x		x		x	х	x	x				x	x					
Urology	MFMSE904		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x		х		
Pediatric Surgery	MFMSE905	х			x				x		x	x			х			х				
Clinical Oncology	MFMSE906	х			x	x	x			х	x			x	х							
Gynecology and Obstetrics	MFMSE907		x	x	x	x					x											
Otorhinolaryngology - Head and Neck Surgery	MFMSE1001	х				x	x		x		x				x	x			х		х	
Maxillofacial Surgery	MFMSE1002	х	x				x				x	x										
Ophthalmology	MFMSE1003		x		x	x			x						х							
Orthopaedics and Traumatology	MFMSE1004		x						x		x											
Physical and Rehabilitation Medicine	MFMSE1005	х	x				x			х	x	x			х							
Environmental and Occupational Health	MFMSE1006					x			x	х		х		x	х	x			х			
Epidemiology with Clinical Rotation	MFMSE1007	x				х			х		х								х			
Medical Statistics	MFMSE1101	х						х		х	х	х				x						х
Pediatrics	MFMSE1102	x	x	x		x	x		x	x	x	x			x							
Family Medicine with Clinical Rotation	MFMSE1103										х	x			x	x	х		х			
Forensic Medicine	MFMSE1104	x	x	x	x	x			x		x				x				x			

Palliative Medicine	MFMSE1105	х							x	x	x				x	x	x				
Health Care Organization and Health Economics	MFMSE1106								x		x		x								
Clinical Pharmacology	MFMSE1201	х			x	x	x		x	x	x	х	x								х
Clinical Rotation: Internal Medicine	MFMSE1202				x	x				x	х	х		x	х		х	х	х		
Clinical Rotation: Surgery	MFMSE1203				x	x	x		х	x	х	х		x							
Clinical Rotation: Pediatrics	MFMSE1204				x					x	x			x	х						
Clinical Rotation: Gynecology	MFMSE1205			x				х		x			x	x	х	х					
Emergency Medicine with Clinical Rotation	MFMSE1206				x	x	x	х	x	x	x	x		x	x	x	x	x	х	х	х
Diploma Thesis	MFMSE1207						х					x								х	х

4. STUDY PLAN

	Year of stud	y: 1					
	Semester:	I					
Courses and a		Course status	Теа	ching ho	ours	Hours	ГСТС
Course code	Course title	Course status	L	E	S	of practice	ECIS
MFMSE101	Medical Physics and Biophysics	obligatory	24	20	16	0	5.5
MFMSE102	Medical Biology	obligatory	45	30	35	0	9.5
MFMSE103	Introduction to Medicine and History of Medicine	obligatory	44	15	31	0	4
MFMSE104	Scientific Methodology	obligatory	24	46	30	0	7
MFMSE105	Medical Ethics	obligatory	20	0	25	0	2
MFMSE106	Croatian Language I	obligatory	0	0	25	0	1
MFMSEI01	Elective course	elective	/	/	/	/	1
ECTS for oblig	atory courses						29
ECTS for elect	ive courses						1
ECTS TOTAL							30

	Year of study	/: 1													
	Semester: II														
Courses and a		Course status	Теа	iching ho	ours	Hours	FOTO								
Course code	Course title	Course status	L	E	S	practice	ECIS								
MFMSE201	Medical Chemistry and Biochemistry I	obligatory	32	26	22	0	7.5								
MFMSE202	Physical Education I	obligatory	0	25	0	0	0.5								
MFMSE203	Anatomy	obligatory	60	90	65	0	21								
MFMSEI02	Elective course	elective	/	/	/	/	1								
ECTS for oblig	atory courses						29								
ECTS for elect	ive courses						1								
ECTS TOTAL							30								

Year of study: 2								
	Semester:	III						
Course code			Teaching hours			Hours	FOTO	
	course the	Course status	L	E	S	of practice	ECIS	
MFMSE301	Medical Chemistry and Biochemistry II	obligatory	42	34	34	0	8	
MFMSE302	Medical Genetics	obligatory	20	5	20	0	3	
MFMSE303	Histology and Embryology	obligatory	50	41	44	0	10	
MFMSE304	Basic Neuroscience	obligatory	20	24	56	0	8	
MFMSE305	Croatian Language II	obligatory	0	0	25	0	1	
ECTS for oblig	atory courses						30	
ECTS for elect	ECTS for elective courses							
ECTS TOTAL							30	

Year of study: 2								
Semester: IV								
Course code		Course status	Теа	ching ho	ours	Hours	FOTO	
	Course title	Course status	L	E	S	practice	LCIS	
MFMSE401	Medical Physiology	obligatory	53	40	87	0	19	
MFMSE402	Medical Psychology	obligatory	20	20	20	0	3.5	
MFMSE403	Immunology	obligatory	30	4	16	0	4	
MFMSE404	Physical Education II	obligatory	0	25	0	0	0.5	
MFMSEI03	Elective course	elective	/	/	/	/	1.5	
MFMSEI04	Elective course	elective	/	/	/	/	1.5	
ECTS for oblig	ECTS for obligatory courses							
ECTS for elective courses							3	
ECTS TOTAL							30	

Year of study: 3								
	Semester:	V						
Courses and a	Course title		Теа	ching ho	ours	Hours	FCTC	
Course code	Course title	Course status	L	E	S	practice	LCIJ	
MFMSE501	Pathology	obligatory	70	70	70	0	16	
MFMSE502	Pathophysiology	obligatory	45	30	60	0	11	
MFMSEI05	Elective course	elective	/	/	/	/	1.5	
MFMSEI06	Elective course	elective	/	/	/	/	1.5	
ECTS for oblig	atory courses						27	
ECTS for elect	ECTS for elective courses							
ECTS TOTAL							30	

Year of study: 3								
Semester: VI								
Code of the course		Course status	Teaching hours			Hours	ГСТС	
	Course title	Course status	L	E	S	practice	ECIS	
MFMSE601	Medical Microbiology and Parasitology	obligatory	21	44	30	0	8	
MFMSE602	Pharmacology	obligatory	50	35	50	0	11	
MFMSE603	Clinical Propedeutics	obligatory	30	70	10	0	6	
MFMSE604	Personalized Medicine and Biotechnology	obligatory	10	10	10	0	1.5	
MFMSE605	Social Medicine	obligatory	20	7	8	0	2	
MFMSEI07	Elective course	elective	/	/	/	/	1.5	
ECTS for oblig	atory courses						28.5	
ECTS for elective courses							1.5	
ECTS TOTAL							30	

Year of study: 4								
	Semester: N	/11						
Course code			Теа	aching ho	ours	Hours	FOTO	
		Course status	L	E	S	of practice	ECIS	
MFMSE701	Nuclear Medicine	obligatory	15	10	5	0	1.5	
MFMSE702	Radiology	obligatory	35	49	16	0	6	
MFMSE703	Internal Medicine	obligatory	65	195	80	0	19.5	
MFMSEI08	Elective course	elective	/	/	/	/	1.5	
MFMSEI09	Elective course	elective	/	/	/	/	1.5	
ECTS for oblig	atory courses						27	
ECTS for elect	ECTS for elective courses							
ECTS TOTAL							30	

	Year of study	/: 4						
Semester: VIII								
Course code		Course status	Tea	ching ho	ours	Hours	FOTO	
Course code	Course title	Course status	L	E	S	practice	LCIJ	
MFMSE801	Neurology	obligatory	24	43	23	0	6	
MFMSE802	Dermatovenerology	obligatory	30	25	15	0	5	
MFMSE803	Anesthesiology and Intensive Medicine	obligatory	20	40	0	0	4.5	
MFMSE804	Infectology with Clinical Microbiology	obligatory	20	65	35	0	8	
MFMSE805	Clinical Biochemistry	obligatory	10	5	15	0	1.5	
MFMSE806	Psychiatry	obligatory	40	30	30	0	5	
ECTS for oblig	atory courses						30	
ECTS for elective courses						0		
ECTS TOTAL							30	

	Year of study	/: 5					
Semester: IX							
Course code	Course Hills	Commentation of	Tea	ching ho	ours	Hours	FOTO
	Course title	Course status	L	E	S	practice	ECIS
MFMSE901	Surgery	obligatory	50	100	50	0	12
MFMSE902	Neurosurgery	obligatory	7	6	7	0	1
MFMSE903	Transfusiology and Transplantology	obligatory	7	8	5	0	1
MFMSE904	Urology	obligatory	10	10	10	0	1.5
MFMSE905	Pediatric Surgery	obligatory	20	5	5	0	1.5
MFMSE906	Clinical Oncology	obligatory	5	35	10	0	2
MFMSE907	Gynecology and Obstetrics	obligatory	70	70	60	0	11
ECTS for oblig	ECTS for obligatory courses						
ECTS for elective courses						0	
ECTS TOTAL							30

Year of study: 5								
Semester: X								
Course of the	Course title	Course shall be	Теа	ching ho	ours	Hours	FOTO	
Course code	Course title	Course status	L	E	S	of practice	ECIS	
MFMSE1001	Otorhinolaryngology - Head and Neck Surgery	obligatory	25	40	10	0	6	
MFMSE1002	Maxillofacial Surgery	obligatory	8	10	7	0	1.5	
MFMSE1003	Ophthalmology	obligatory	20	30	15	0	5.5	
MFMSE1004	Orthopaedics and Traumatology	obligatory	20	40	15	0	6	
MFMSE1005	Physical and Rehabilitation Medicine	obligatory	10	20	10	0	2	
MFMSE1006	Environmental and Occupational Health	obligatory	20	20	20	0	3	
MFMSE1007	Epidemiology with Clinical Rotation	obligatory	20	30	20	0	3	
MFMSEI10	Elective course	elective	/	/	/	/	1.5	
MFMSEI11	Elective course	elective	/	/	/	/	1.5	
ECTS for oblig	atory courses						27	
ECTS for elective courses						3		
ECTS TOTAL							30	

	Year of study	/: 6					
Semester: XI							
Course code		Course status	Теа	ching ho	ours	Hours	FOTO
	Course title	Course status	L	E	S	of practice	LCIJ
MFMSE1101	Medical Statistics	obligatory	5	20	5	0	1.5
MFMSE1102	Pediatrics	obligatory	50	90	60	0	12
MFMSE1103	Family Medicine with Clinical Rotation	obligatory	22	114	44	0	9
MFMSE1104	Forensic Medicine	obligatory	17	16	17	0	3
MFMSE1105	Palliative Medicine	obligatory	8	10	7	0	1
MFMSE1106	Health Care Organization and Health Economics	obligatory	30	5	10	0	2
MFMSEI12	Elective course	elective	/	/	/	/	1.5
ECTS for oblig	ECTS for obligatory courses						
ECTS for elective courses						1.5	
ECTS TOTAL							30

	Year of study	/: 6						
Semester: XII								
Course code		Course status	Теа	ching ho	ours	Hours	FCTC	
	Course title	Course status	L	E	S	practice	ECIS	
MFMSE1201	Clinical Pharmacology	obligatory	10	15	15	0	2	
MFMSE1202	Clinical Rotation: Internal Medicine	obligatory	0	100	20	0	5	
MFMSE1203	Clinical Rotation: Surgery	obligatory	0	100	20	0	5	
MFMSE1204	Clinical Rotation: Pediatrics	obligatory	0	100	20	0	5	
MFMSE1205	Clinical Rotation: Gynecology	obligatory	0	100	20	0	5	
MFMSE1206	Emergency Medicine with Clinical Rotation	obligatory	0	100	20	0	5	
MFMSE1207	Diploma Thesis	obligatory	0	90	0	0	3	
ECTS for obligatory courses							30	
ECTS for elective courses							0	
ECTS TOTAL							30	
5. SYLLABI

Study	MEDICAL STUDIES	IN ENGLISH										
programme												
Cycle	INTEGRATED	Туре	UNIVERSITY									
Study track	-	Module	-									
Year of study	1	Semester	[
Course title	MEDICAL	Course	MFMSE101									
	PHYSICS AND	code										
	BIOPHYSICS											
ECTS	5.5	Status	OBLIGATORY									
	Teaching hours		Lectures	Exercises	Seminars	Practice						
			24	20	16	0						
Course	- to provide the st	udents with kn	owledge regarding the basics	cs of atomic p	physics and basic	physical						
objectives	phenomena and la	IWS.		<i>c</i>								
	- to achieve theore	etical knowledg	e that is necessary as a prere	requisite for i	understanding th	he basics of						
	nuclear physics, nu	physics, nuclear medicine, radiological physics, magnetic resonance in physics.										
	- to provide stude	provide student with the understanding of biotransport, membrane and action potential, physics of										
	the ear and hearin	ar and hearing, physics of the eye and vision, and measurement of the potentials on the surface of										
	the body.	dy.										
	- to provide stude	ovide students with understanding of the work of the human body: the deformation of a solid										
	body (elastic and p	elastic and plastic deformation) and the representation of the musculoskeletal system as a system										
	of levers.											
	- to achieve under	standing of the	work of the heart and circul	liation and tr	ie physics of the	lungs and						
	Learning outcome	(10)			Course learning	LO code at the						
Course	Student:	(10)			outcome code	study program						
learning						level						
outcomes	- Describes	and explains	the physical basics nece	essary for	IU-MFMSE101-	IU-MSE1						
	understar	nding the appl	ication of physical laws in	biological	1	IU-IVISE7						
	systems a	nd the basics o	f biological processes at the r	molecular								
	- Describes	and explains	nhysical quantities and unit	ts used in	IU-MEMSE101-	IU-MSF1						
	biophysic	s	physical qualitities and and		2	IU-MSE3						
	 Explains t 	he basic conce	pts of mechanics and hydron	mechanics	IU-MFMSE101-	IU-MSE1						
	and apple	es them to the	human body		3	IU-MSE3						
	- Explains	and defines	the basic terms and	laws of	IU-MFMSE101-	IU-MSE1						
	thermody	namics and us	es them to explain the behav	vior of the	4	IU-MSE3						
	human bo	ody as a thermo	odynamic system									
	- Applies	the basic co	oncepts of electromagnet	tism and	IU-MFMSE101-	IU-MSE1						
			s the mechanisms of in	nteraction	J							
	- Describes	ionizing radiat	ion and substances the eff	fects that	6	IU-MSE7						
	ionizing r	adiation can c	ause in humans, and recog	gnizes the								
	importan	ce and scope o	f work of dosimetry and defi	ine doses								
	- Explains	the laws of	optics and applies them	n to the	IU-MFMSE101-	IU-MSE1						
	propagati	on and nature	of light, the creation of an	n image in	7	IU-MSE7						
	the eye,	and optical de	evices and the correction o	of optical								
	errors of	the eye using g	lasses									
	- Defines a	and explains v	ibration of mechanical syst	stems and	IU-MFMSE101-	IU-MSE1						
	applies it	to the descrip	uon of sound waves and exponentic parameters and exp	vsiological	0	IO IVISE/						
	sensation	s of sound way	es	ysiological								
	- Distinguis	hes radiogram	 ns from scintigrams. echogr	rams and	IU-MFMSE101-	IU-MSE1						
	images o	btained by m	agnetic resonance or com	puterized	9	IU-MSE7						

		tom met for	ography, a hods of med	nd reco lical dia	ognizes what t gnostics represe	hese basic in the basic in the basic here basic here basic b	maging hey are						
Prerequisit	tes	In accordance	e with the Ru	ilebook	on the Integrate	d Studies at the	e School of Med	icine U	niversity of Mostar.				
for the cou	irse												
enrolment													
	-	Week / shift		Тор	ic								
Course		Lectures		(L1)	Introduction. Ba	sics of nuclear	physics						
content				(L2)	Radiation and m	atter							
				(L3)	(L4) Physical basis of nuclear medicine								
				(L4)	(L4) Physics of diagnostic radiology								
				(L5)	(L5) Physics of MR imaging								
				(17)	Biotransports m	embrane note	ntial						
				(18)	Action notential								
				(19)	Biophysics of ser	nses, ear and h	hearing						
				(L10)) Biophysics of th	ne eve and visi	on						
				(L11) Biomechanics of	of tissues							
				, (L12	(L12) Body biomechanics								
				(L13	(L13) Haemoreology 1								
				(L14) Haemoreology	2							
		Seminars		(S1)	Recapitulation s	eminar 1: L1-L	3						
				(S2)	Recapitulation s	eminar 2: L4-L	6						
				(S3)	Comparison of d	liagnostic met	hods						
				(S4)	Potentials on the	e surface of th	e body						
			(S5) Recapitulation seminar 3: L7-L8										
				(56)	Recapitulation s	eminar 4: L9-L	10						
				(57)	Recapitulation s	eminar 5: L11- ominar 6: L12							
	-	Evercises		(30) (F1)	Introduction to		s Overview Sta	tistics					
		EXCICISES		(E1)	(E2) Cyclic exercises $C1 - C6$								
				(E3)	(E3) Cyclic exercises C1 – C6								
				(E4)	(E4) Cyclic exercises C1 – C6								
				(E5)	(E5) Cyclic exercises C1 – C6								
				(E6)	Cyclic exercises	C1 – C6							
				(E7)	(E7) Cyclic exercises C1 – C6								
				(E8)	(E8) Radioactivity and Radiation Protection								
				(E9)	Computer Tomo	graphy, Exterr	nal Beam Radiot	herapy	,				
				(E10)) Practical exam								
				64									
				C1:	Nicroscopy	lu - i -							
				C2:	Periodic Signal Al	naiysis							
				C3.	Viscosity								
				C5.	Surface Tension								
				C6:	Air Humidity								
Language		English											
E-learning		Classes are ta	aken in perso	on. If ne	cessary, lectures	, seminars and	part of the exe	rcises c	an take place				
		combined (liv	e and online	e) or coi	mpletely online v	ia e-learning p	latforms (Goog	le Mee	t) up to max 20 %.				
Teaching		Teaching, inte	eractive and	active-	experiential.								
methods				T	f a constant (in a	diasta Dald)							
		Type of	re-evamina	tion ob	ligation	licate - Bold)		Type of	evam				
midterm	somi	nar essav/re		ractical	/project task	other	written	or or					
muterm	pan	er		actical		Julei	exam	exa	m				
	1 P 4 P	-	Alloca	tion of	ECTS credits and	share in the g	rade	0,10					
Stude	ent obli	igations	Learni	ng	Hours of v	vorkload	Share in EC	TS	Share in grade				
	Student obligations Learnin outcome c								0				

Attending classes		60	2								
Students' activity during		30	1	20% - in pre-							
interactive seminars				exam term							
Pre-exam/Practical exam	IU-MFMSE101-2	30	1	10% - in pre-							
	IU-MFMSE101-3			exam term							
	IU-MFMSE101-4										
	IU-MFMSE101-6										
	IU-MFMSE101-9										
Pre-exam/Written exam	IU-MFMSE101-1	45	1.5	70% - in pre-							
	IU-MFMSE101-2			exam term							
	IU-MFMSE101-3			100% - all other							
	IU-MFMSE101-4			terms							
	IU-MFMSE101-5			ternis							
	IU-MFMSE101-6										
	IU-MFMSE101-7										
	IU-MFMSE101-8										
	IU-MFMSE101-9										
In total		165	5.5	100%							
	Method of calculating the final grade										

Students have to pass the written exam (in form of a test, comprised of 60 questions, each containing 5 statements: 4 false and 1 true). The threshold for the written exam is 33 points. Number of total bonus points awarded during seminars and practical exam will be added to the written exam score if a student passes the threshold for the written exam of 33 points. Bonus points are valid only for the first exam term. According to the Rulebook on Studying final grade is obtained as follows:

A = 91-100% 5

B = 79 to 90% 4

C = 67 to 78% 3

D = 55 to 66% 2

F = 0 to 54% 1

Literature	Title	tion		Lan	guage			Type of l	iteratur	е	
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	1. Eterović D.: Physics		*		*					*	
	of diagnostic imaging										
	for medical students,										
	Zagreb, 2002.										
	2. Eterović D.:		*		*					*	
	Biophysical grounds of										
	physiology; script										
	materials										
	3. Eterović D. et. al.:		*		*					*	
	Laboratory exercises -										
	Medical physics and										
	biophysics										
Additional	1. JA Pope: Medical		*		*			*			
	Physics (second										
	edition); Heinemann,										
	1989.										
Additional co	urse information										

Students' obligations:

Students have to attend all course lectures, seminars and exercises. Up to 20% of justified absence from seminars and lectures can be tolerated. Students are expected to participate actively during the course.

Types of seminars:

First type is described in the course curriculum by a name of the topic to be covered. The names in the curriculum correspond to the chapter titles in the literature. Seminars are interactive. The teacher explains the topic at hand and can pose questions to the students in order to assess their current knowledge. Students are expected to prepare the content of corresponding seminars in advance.

Second type of seminar is a recapitulation seminar. The goal of this type of seminar is to address the most common issues regarding the topics covered during few previous lectures and seminars. The student's positive response at recapitulation

seminar will be awarded with a bonus point. Only one bonus point per seminar can be obtained by one student. Number of possible bonus points at seminars is 6.

Types of exercises:

Introduction exercise term includes explanation of mathematical functions and statistical methods required to analyze data collected during cyclic exercises.

First exercise type - cyclic exercises (C1-C6) include six different laboratory exercises. Students are expected to prepare the content of corresponding exercise in advance. The teaching material will be posted on the students' platform (SUMARUM). At the beginning of exercises the teacher will check whether the students are ready to perform the exercise

through a short conversation. During exercise the students will make measurements. They are supposed to analyze data at home and present their reports during next exercise term. The teacher will review the results and make comments if mistakes were made during collecting data or calculation. If student does not bring or present unsatisfactory report he/she will be obligated to repeat that exercise during additional exercise term that will be organized at the end of classes. Student can repeat exercise only once. If a student doesn't appear for any of exercises he/she will have to take an additional exercise term. All students who miss one exercise term will be obliged to take it.

Second exercise type will be organized in the hospital. The goal is to familiarize students with the physical methods and instrumentation used in the hospital in order to obtain detailed diagnostic information and achieve useful therapeutic effects

After completing all the exercises, students are obligated to take practical exam related to the exercises. Students will be awarded with a bonus point during practical exam. Number of minimal bonus points that student should obtain during practical exam in order to qualify to take written exam is 2. Maximal number of bonus points that student can achieve during practical exam is 5.

Attending all exercises is mandatory. Students are strongly advised to participate actively during the course. Practical exam will be related to exercises during course.

Exam:

Students have to pass the written exam (in form of a test, comprised of 60 questions, each containing 5 statements: 4 false and 1 true). The threshold for the written exam is 32 points. Number of total bonus points awarded during seminars and practical exam will be added to the written exam score if a student passes the threshold for the written exam of 33 points. Bonus points are valid only for the first exam term.

Study	MEDICAL STUDIES	5 IN ENGLISH									
Cycle	INTEGRATED	Type	UNIVERSITY								
Study track	-	Module	-								
Year of study	1	Semester	1								
Course title		Course code									
course title	BIOLOGY	course coue									
ECTS	9.5	Status	OBLIGATORY								
	Teaching hours		Lectures	Exercises	Seminars	Practice					
			45	30	35 0						
objectives	ne objectives of principles of mod human diseases, a necessary for und molecular biology involved in proble in order to develo processes, as wel	the Medical Bi ern biological s and the future lerstanding of r development em-orientated s op practical con l as critical thin	cience which is of high ir of medicine. During this nodern biomedical litera al biology with an emphi work, organized in the fo nmunication skills and ur king based on acquired k	an introduction for mportance for the course, students s ature. The student asis on human bic orm of blended lec nderstanding of fu knowledge in mod	or students to the diagnosis and the should acquire ter s will learn basic c blogy. They will be ctures, seminars an indamental biolog lern biological scie	basic erapy of minology cell biology, actively nd exercises ical ence.					
	Learning outcome	e (LO)			Course learning	LO code at					
Course learning	Student:				outcome code	the study program level					
outcomes	Describes and e	explains the b	basic structure and fu	nction of cells	IU-MFMSE102-1	IU-MSE1					
	(macromolecules, organelles, mitoc and tumor biolog	(macromolecules, cytoskeleton, transport of macromolecules, organelles, mitochondria and energy production, cell cycle, cell signaling and tumor biology)									
	Describes and explains the basics of molecular cell biology (cell genome, replication and repair of DNA, transcription and RNA species, regulation of transcription, RNA modification, translation, regulation of translation, synthesis and modification of proteins, transport and function of										
	Distinguishes the (fertilization, mein of cell differentiat	e principles of osis, mitosis, st tion)	the basics of develop em cells and the molecu	omental biology Ilar mechanisms	IU-MFMSE102-3	IU-MSE3					
	Distinguishes the inheritance, sexua genetic counselin	medical huma al and autosom g)	an genetics (basic princ al inheritance, chromoso	iples of genetic ome aberrations,	IU-MFMSE102-4	IU-MSE4					
Prerequisites	In accordance wit	h the Rulebook	on the Integrated Studi	es at the School of	f Medicine Univer	sity of Mostar					
for the course	in accordance wit		on the integrated studi		i weatenie oniver.						
enrolment											
	Week / shift	Торі	с								
Course content	Lectures	L1 - men L2 - L3 - L4 - L5 - L6 - L7 - L8 - L9 - L10 L11 L12 L13 L14	 L1 – Cell -evolution prokaryotes vs. eukaryotes, cell compartments, inner membrane, cytoplasm L2 - cell structure, the cell chemistry, macromolecules, enzymes L3 - Cell membrane L4 - Nucleic Acids, gens, eukaryotic organisms, DNA L5 - Nucleus, transport, organization, nucleolus L6 – cytoskelet - microfilaments, intermediar filaments, microtubules L7 - extracellular matrix and organization, cell surface, cellular interactions L8 - Cell research methods and microscopy L9 - Introduction to molecular biology - DNA replication and telomeres L10 - maintenance and DNA recombination, DNA repair L11 - synthesis and RNA transcription, transcription factors L12 - synthesis and RNA transcription, RNA trafficking L13 - genomic DNA, recombination, protein sorting and transport 								
		L15	 Bioenergetics and meta 	abolism, mitochor	ndria and peroxiso	mes					

						L16 - t L17 - p L18 - 0	ransport a protein trar Cell signalin	nd protei nsport - v ng - signal	n sorting esicular molecu	g - ER, Golgi a transport, lys les and actior	pparatu osome n of cell	ıs surface ı	receptor	rs		
						L19 - (netwo	Cell signalir ork	ng - intrad	ellular s	signal transdu	iction, d	cytoskele	t and sig	gnaling		
						L20 - c	ell cycle - c	ell cycle c	heckpoi	nts, cell cycle	regulat	ion, mito	sis and r	neiosis		
						L21 - N	Meiosis	coll doot	_							
						L22 - F	rogramed	cell deati	1							
						L24 - 0	Cancer - de	velopmer	nt and ca	auses, tumor	viruses,	oncoger	nes			
		Semin	ars			S1 - ce	ell structure	e, the cell	chemist	stry, macromolecules, enzymes						
						S2 - ce	S2 - cell membrane - micro and macro molecules transport									
						S3 - Nucleus, DNA S4 - extracellular matrix and cytoskeleton										
						54 - extracellular matrix and cytoskeleton 55 - DNA analysis										
						S6 - protein analysis										
						S7 - cell genome, DNA replication										
						S8 - tra	anscription	ı, transcri	ption re	gulation, tran	sport a	nd proce	ssing of	RNA		
						S9 - tra	anslation a	nd transl	ational r	egulation						
			S10 - ER and Golgi apparatus S11 - Bioenergetics and metabolism mitochondria and neroxiso									mes				
				S12 - Cell signaling												
				S13 - cell cycle												
				S14 - Stem cells and programed cell death												
				S15 - Cancer												
	ŀ	Tutori	alc			S16 - r	epetition a		ledge te	sting						
		Tuton	als			F2 (4 ł	nours) - Me	whods of	cell inve	estigation. Mic	roscon	e and mi	croscop	v 1		
						E3 (4 ł	nours) - Me	ethods of	cell inve	estigation. Mic	croscop	e and mi	croscop	y 1		
						E4 (2 ł	nours) - Rep	petition. I	Vicrosco	ope and micro	scopy					
						E5 (10	hours) - Pi	rotein ana	alysis							
Language		Englis	h	t												
E-learning		Up to	20% (16 ing_int	ectures). a and a	ctive-ev	tive-experiential.									
methods		reach	ing, int	cructiv			וויכ-כגףכו וכוונומו.									
					1	ypes of	assessmer	nt (indicat	e - Bold)						
		Т	ype of	pre-exa	aminat	ion oblig	gation				Тур	e of exan	n			
midterm	sen	ninar	essa	ay/	pra	ctical/p	roject task		other	written		oral	prac	ctical		
	ра	per	repo	ort	Allocat	tion of F	CTS credite	s and sha	ro in the	exam		exam				
Studen	t obl	igation	s	16	arning		Hours	of workle	had	Share i	n FCTS	Sł	nare in g	rade		
01000			-	outc	ome co	de				endre i						
Class a	atter	ndance						110		3,	6					
Semi	nar p	baper		IU- M	FMSE1	02-1		45		1,	5		20%			
				IU- M	FMSE10)2-2)2-3										
				IU- M	FMSE1	02-4										
Pre-exam,	/Wri	tten ex	am	IU- M	FMSE1)2-1		130		4,	4		80%			
				IU- M	FMSE1()2-2)2-3										
				IU- M	FMSE1)2-4										
		In	total					285		9,	5		100%	,)		
		Met					of calculat	ing the fir	nal grad	e						
The final gra	ade i of th	is obtai e grade	ined as e). A de	a weig etailed o	hting c lescrip	ot the gr tion is g	ades from iven in the	the semi addition	nar assi al course	gnment (20% e information	of the	grade) a	nd the v	vritten		
Literature		-	Title		Edi	tion		Lan	guage			Type of I	iteratur	e		
(indicate)	(title, aι	uthor, y	/ear)	own	other	croatian	english	other	multilingual	book	article	script	other		
Compulsor v	Co RF	oper G	iM, Hau e Cel	usman II. a		х		x			х					

							-			
	Molecular Approach. 8th ed. Washington DC, Sunderland									
	(Massachussets):									
	Asim Fress, Sinduer									
	Cox TM Sinclair I									
	Molecular biology in									
	medicine. Blackwell									
	Science, 1997.									
	Oxford, UK (5th and									
	17th chapter)									
Additional	Alberts B et. all.	х		х			х			
	Essential Cell Biology,									
	New York, Garland									
	Science,3/e, 2009			_						
	Turnpenny P, Ellard S.									
	Medical Genetics									
	14th edition Elsevier									
	Churchill Livingstone.									
	Edinburgh 2011.									
Additional c	ourse information			I	<u> </u>			<u> </u>	1	1
Further exp	lanation: The course of Me	edical biol	ogy is perfoi	med durii	ng the firs	st semester in	the for	m of lect	ures (45	5
hours), semi	nars (35 hours) and exerci	ises (30 ho	ours). All form	ns of educ	cation are	e obligatory, a	nd the	participa	tion of	
students wil	l be monitored regularly.									
The teacher	evaluates the student's pa	articipatio	n in the sem	inar (dem	onstrated	d knowledge,	underst	anding, a	ability to	
define probl	ems and reasoning).			ماد معاد				بمرامم ما		
Seminars co	nsist of seminar work and d from 1 E. This mark will	quizzes. F	or seminar v	vork each	student	will get their t	own top ch with	nc and pr	esentat	ion a por
seminar) M	avimal number of noints c	an he 160	(16 seminar	s) These	noints wi	ll he evaluate	d as 109	4ui2 (10 % of final	grade	i pei
according to	the key: $91 - 110 - pass:$	111 – 120	– good: 121	– 140 – v	erv good	: 141 - 160 – e	excellen	t.	grade	
Written test	consists of 80 questions; 5	55 percen	t is necessar	v to pass (44 points	s). Written tes	t will be	e evaluat	ed as 80	% of
final grade.										
$\Lambda\Lambda_{-52} = cuff$	cient									
44-32 = 300										
63-71 – verv	r good									
72-80 – exce	ellent									
Final mark: seminar work (10% of grade) + seminar quizzes (10% of grade) + written exam (80 % of grade).										

Final mark: seminar work (10% of grade) + seminar quizzes (10% of grade) + written exam (80 % of grade).

Study	MEDICAL STUDIES I	EDICAL STUDIES IN ENGLISH									
programme											
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module	-								
Year of study	1	Semester	1								
Course title	INTRODUCTION	Course code	MFMSE103								
	TO MEDICINE										
	AND HISTORY OF										
FOTO	MEDICINE	<u> </u>									
ECIS	4	Status	OBLIGATORY								
	leaching hours		Lectures Exercises	Seminars	Practice						
	- · · ·		44 15	31	-						
Course	To acquaint medica	to acquaint medical students with:									
objectives	- studying at the Fa	of medicine thro	z, ughout history								
	- the role of doctors	stem and in society.									
		,	,								
	Also, the aim is to a	nalyze the defini	ition of health and health system in a	narrower and w	ider						
	environment and th	rough the basics	s of Latin to create a foundation for le	arning unique m	edical						
	terminology.										
	Loorning outcome (Course	LO code at the						
Course learning	Student.	10)		learning	study program						
outcomes	Student.			outcome	level						
				code							
	Plans independent	learning through	n studies in a way of critical and self	- IU-	IU-MSE7						
	critical questioning	of scientific truti	ns.	WEWSLIUS-1	IU-MSE21						
	Describes the deve	opment of medi	ical thought and practice through the	e IU-	IU-MSE9						
	history of different	cultures.		MFMSE103-2							
	Correctly values sci	entific achievem	ents in the development of medicine	IU- MFMSE103-3	IU-MSE7						
	Demonstrates pos	session of pers	sonality qualities (team work and	IU-	IU-MSE9						
	personal contributi	on, active listeni	ng and building positive relationship	MFMSE103-4							
	with group member	rs).									
	Explains the import	ance of preventi	ve and curative medicine.	IU-	IU-MSE9						
				WEWSE103-5	IU-MSE11						
	Describes and expla	ins first aid proc	edures.	IU-	IU-MSE11						
				MFMSE103-6	IU-MSE21						
	Forms regular and	d irregular mor	phological forms according to the	PIU-	IU-MSE16						
	declinational and Co	njugation system	II (Lauii).								
Prereguisites	In accordance with	the Rulebook	on the Integrated Studies at the Sc	nool of Medicin	e University of						
for the course	Mostar.		C C		,						
enrolment											
	Week / shift	Тор	lic								
Course content	Lectures	e, division of med	licine and the								
		role	e of the doctor		on of books						
		ine	main nealth problems in FBIH (in ter	ms of organizatio	on of health						
		The	clinical requiring of basic resuscitation	on procedures ar	nd sensitivity of						
		bra	in cells to stop circulation (hypoxia)	n procedures di	ia sensitivity of						
		Rec	ognizing obstruction of upper airway	and corrective a	ctions						
		Lati	n								
	Access to health care in pediatrics. The most common health problem										
		in p	ediatrics.								

		Acute poisoning and first aid (identification and elimination of toxins
		from the body, antidotal and symptomatic therapy the most common
		poisoning, poisoning plants)
		Medical Sociology, Health behavior: positive promotion and illness.
		Medical Sociology: Theory of stress and social support. The main forms
		of social anomie. Career patients
		Historical development of nursing. Definitions and theories of health
		care. Basic numan needs and their relation to health care. The nurse as
		a person, professional, ethical and moral issues. Basicskins assessment
		Basic revival procedures and subsequent resuscitation methods
		Basic revival procedures and subsequent resuscitation methods
		The historical turning point medicine Basics of scientific medicine
		Looking back in history of medicine. Birth of modern medicine
		Introduction to medical care
	Seminars	What is the health (WHO definition), how to preserve it and improve it?
		Social-economic development and health
		Hypoxia and consequences
		Obstruction of upper airway - first aid
		Word formation - morphology of medical terms
		Combining forms: body parts and tissues
		Cardiopulmonary resuscitation of the newborn.
		Acute poisoning and first aid
		Theoretical approaches to the relationship doctor-patient.
		The task of the medical profession in the past and today. The way to a
		medical profession
		Prevention of infection, the conditions essential for the development of
		infection
		The difference between the percentage of oxygen that patient gets
		from exhaled mixture of the air of rescuers and the application of
		mechanical ventilation
		ECG normal curve and ventricular fibrillation, total atrioventricular
		block and electromechanical dissociation
		Psychological Medicine and its importance in the everyday activities of
		doctors
		Health care education
	Evercises	Resigner resuscitation procedures
	Exercises	Obstruction of upper airway - first aid
		Terms pertaining to the body as a whole:
		1 structural organization of the body.
		2. body cavities:
		3. abdominopelvic quadrants and regions;
		4. anatomical division of the back;
		5. positional and directional terms;
		6. planes of the body
		The procedure with a child in convulsions
		Acute poisoning and first aid
		Mastering basic skills of nurturing patients, patients personal hygiene
		and hygiene of its environment, care for comfort
		ECG
		Psychological Medicine
Language	English	
E-learning	Classes are conducted live. If ne	ecessary, lectures and seminars can be held combined (live and online) or
Teaching	Teaching interactive and active	
methods		, experiential.
	Types (of assessment (indicate - Bold)

		Type of p	re-exa	mination obligation	tion		Т	ype of	exan	n
midterm	seminar	essay/re	port	practical/p	roject task	other	written	ora	I	practical
	paper						exam	exai	m	
Allocation of ECTS credits and share in the grade										
Stud	ent obligatio	ons	Lear	ning outcome	Hours of w	orkload	Share in EC	CTS	Sh	are in grade
				code						
Attending classes with		with	IU-MFMSE103-1		00		2		0%	
e	engagement		IU	-MFMSE103-4	50		5		070	
			IU	-MFMSE103-2						
			IU	-MFMSE103-3						
Pre-exa	am/Written e	exam	IU	-MFMSE103-5	30		1			100%
			IU	-MFMSE103-6						
		١U	-MFMSE103-7							
		In total			120)	4			100%
				Method of c	alculating the fi	nal grade				

The exam is written.

All those who have not missed classes have the right to take the tests. Also, the tests can be taken by those who passed the teaching units during which they were not in class or in which they did not demonstrate sufficient knowledge. At the end of the class in a pre-exam term and all subsequent terms the test will include material from introduction to medicine, medical sociology, first aid, health care and history of medicine in the form of an integrated test and a special exam in Latin.

According to the Rulebook on Studying final grade is obtained as follows:

A = 91-100% 5

B = 79 to 90% 4

C = 67 to 78% 3

D = 55 to 66% 2

F = 0 to 54% 1

Literature	Title	Edit	ion		Lan	guage		Type of literature				
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	Detels R, Beaglehole R, Lansang MA, Gulliford M editors. Oxford Textbook of Public Health, 5th ed. Oxford University Press, New York 2011.		x		Х			x				
	Porter R. The Greatest Benefit to Mankind: A Medical History of Humanity. Fontana Press; 1999. (Chapters II, III, V, VIII, IX, X and XI)		X		x			x				
	Jerry P. Nolana,*, Jasmeet Soarb, David A. Zidemanc, Dominique Biarentd, Leo L. Bossaerte,Charles Deakinf, Rudolph W. Kosterg, Jonathan Wyllieh, Bernd Böttigeri,on behalf of the ERC Guidelines Writing Group: European Resuscitation Council Guidelines for Resuscitation 2015. Besuscitation 81 (2015)		x		x							

	Handouts and Dorland's		Х		Х						Х
	Illustrated Medical										
	Dictionary, Saunders										
Additional	Additional literature will										
	be assigned individually										
	during the seminar										
	preparations according										
	to the seminar theme.										
Additional course information											

Study	MEDICAL STUDIES IN ENGLISH												
programme		T											
Cycle	INTEGRATED	Туре	UNIVERSITY										
Study track	-	Module	-										
Year of study	1	Semester											
Course title	SCIENTIFIC	Course	MFMSE104										
ECTS	7	Status	OBLIGATORY										
	Teaching hours		Lectures Exercises	Seminars	Practice								
	0		24 46	30	-								
Course objectives	The aim of the court - performing the second postulates of science - learning (especia research studies. Additional aim is to later years of study	rse is to enabl study and pre ce and inform lly permanent o enable that a	e students to acquire knowledge and skill senting the results of the research thesi ation technology; t medical education i.e. lifelong learning all students, future physicians, recognize	s necessary for t s by applying th) using the resu and utilize the f	he following: he fundamental ults of scientific ollowing during								
	 evidence-based m continuous develor various subjects of the role and the development and ii presenting the rest learning (especial 	ater years of study: evidence-based medical information (information) continuous development of the scientific way of thinking and the use of scientific principles in studying arious subjects of preclinical and clinical medicine the role and the tasks of physicians in the health care team using basic scientific principles in the evelopment and improvement of diagnosis of disease and treatment of patients presenting the results of professional and research work using IT technology learning (especially in the field of permanent medical training) using computer networks (the Internet).											
	Learning outcome	(LO)		Course	LO code at								
Course learning outcomes	Student:			learning outcome code	the study program level								
	Explains, differentia	ates and inter	prets types of research in medicine.	IU- MFMSE104-1	IU-MSE1								
	Designs, organizes postulates of respo	and condu nsible and ob	cts scientific research based on the jective science and teamwork.	IU- MFMSE104-2	IU-MSE9								
	Collects, distinguis	nes and classif	ies types of data in medicine.	IU- MFMSE104-3	IU-MSE7								
	Interprets the foun statistical test.	dations of sta	tistical inference and chooses a suitable	IU- MFMSE104-4	IU-MSE7								
	Writes, evaluates, i	revises and pr	esents a scientific paper.	IU- MFMSE104-5	IU-MSE7								
	Reviews the strate information, prese	gy for searchin nts and applie	ng and evaluating medical literature and s them in appropriate manner.	IU- MFMSE104-6	IU-MSE19 IU-MSE20 IU-MSE21								
Prerequisites for the course enrolment	In accordance with	the Rulebook	on the Integrated Studies at the School of	Medicine Unive	ersity of Mostar.								
	Week / shift	Тор	ic										
Course content	Lectures	Week / shift Topic Lectures L1. Medicine is science - an introductory lecture L2. Scientific research L3. Scientific information L4. Scientific work L5. Medical data L6. Science and preclinical/clinical medicine L7. Medical information on the web											
	L6. Science and precinical/clinical medicine L7. Medical information on the web L8. Index publications and access to them L9. Ethics in research L10. Basics of statistical conclusion L11. How to select an appropriate statistical test? L12. Presenting the results of scientific work												

		Sem	inars tical (Exe	rcises)	 S2. Praining sciencific research and determining topics by individed of students S3. Types of scientific research, measurement S4. Use of bibliographic sources and strategies for their search S5. Scientific article in medicine S6. Data collection and measurement S7. Data types (Analog, Digital) S8. Preparation for data processing S9. Preparation for writing own scientific article (instructions for mentor agreement) S10. Interpreting the research results S11. Scientific article presentation and discussion S12. Writing own scientific article S13. Communication skills in scientific research S14. Preparation of the final draft of students' own scientific word is scientific and processing P1. Data collection P2. Data collection and formatting – sorting, formulas, function P5. Confronting the data – Data entry P6. Confronting the data – Data entry P7. Data validation – analyzing the correctness and validity of the data; organizing data 							
					P7. dat P8. P9. P10	Data validation – a; organizing data Dealing with the o Dealing with the o Confronting the	analyzing the data – Data pr data – Data pr data – Data pr	correctness and ocessing ocessing (2) resentation	validit	y of t	he entered	
					P11 scie P12 pro P13 P14 arti	 P11. Writing the Materials and methods and Results sections of own scientific article P12. Search for the relevant journal articles in accordance with the set problem and strategy P13. Analysis of the structure and content of the selected scientific article P14. Writing the Introduction and Discussion sections of own scientific article 						
					P15 P16	. Writing Referen . Final writing and	ces – introduc I submitting th	tion to referenc	e orgai er for r	nizing eview	tools /	
Language		Engl	ish		·							
E-learning		Class and onlin	ses are co online) oi ne.	nduct r onlin	ed live. If neo e via e-learni	essary, lectures, s ng platforms (Goo	seminars and p ogle Meet) - up	oart of the exerc to max. of 20%	ises ca of the	n be c class	combined (live es can be held	
Teaching		Теас	ching, inte	eractiv	e and active-	experiential.						
					Types	of assessment (ind	dicate - Bold)					
			Type of	ore-ex	amination ob	oligation		7	Type of	exam	1	
midterm	semi	inar	essay/re	eport	practica	l/project task	other	written	or	al	practical	
	hab				Allocation of	ECTS credits and	share in the g	rade	exa			
Stude	ent obl	ligatio	ons	0.11	Learning	Hours of w	vorkload	Share in EC	TS	Sh	are in grade	
Attending	classe	s		Jul		100)	3.33			20%	
Practical/p	roject	task	with	IU-N	VFMSE104-2	70	-	2.33			50%	
oral prese	ntatio	า		IU-N	MFMSE104-3							
		IU-MEMISE104-4 IU-MEMSE104-5										
				IU-MFMSE104-6								
Written ex	am		IU-MFMSE104-6 IU-MFMSE104-1 40 1.34 30% IU-MFMSE104-2 IU-MFMSE104-2									

		IU-M	FMSE1	04-3								
		IU-M	FIVISE10 FMSF10)4-4)4-5								
		IU-M	FMSE1	04-6								
	In total					210		7			100%	,)
			N	lethod (of calculati	ng the fin	al grade	5				
The final grad	le is obtained by a	adding	up the	total n	umber of p	oints ach	ieved b	y regular atte	ndance	at class	es (20%	of the
grade), exam	results (30% of the	ne grad	e) and	the qu	ality of scie	entific res	earch (\	written work a	and pre	sentatio	n of the	e work,
Jiterature	Titlo	escripti	E A	ition				ibout the subj	ect.	Type of	litoratur	<u>م</u>
(indicate)	(title, author, v	(ear)	own	other	Croatian	English	other	multilingual	book	article	script	other
Compulsory	Matko Maručić	ot al ·	•	v	o, o a dian	v			v		senpe	o tinei
Compulsory	Principles of rea	et al		^		^			~			
	in medicine,	2nd										
	edition, Medi	cinska										
	naklada, Zagreb	2019.										
Additional	Teaching materi	als	х			х						х
Additional co	urse information											
Teaching in S	cientific Methodo	ology co	onsists	of lect	ures, semir	nars and	exercise	s, where the	focus is	s on prac	ctical ex	ercises
and the creat	tion of own resear	rch (50%	% of th	ie lesso	n) where e	ach stude	ent mus	t work in a te	am (sm	all grou	p) on a ı	unique
research proi	plem under the si	upervisi	ion of	the hea	ad of the e	xercises	and the	nead of the	course.	Teachin	ig is org	anized
Science in pre	edening units: 1. s	al modi	C Wdy	Studen	ts' scientifi	nunc res	earch 3	. Scientific info	ormatic	on 4. Sci		VOIK 5.
Science in pre		armeur	cine o.	Studen	its scientin	C WORK.						
Student wor	k and activity in (class ar	e cont	inuousl	y evaluated	d during	classes,	mainly in ser	ninars	and exe	rcises th	nat are
organized thr	ough the active w	ork of s	tuden	ts unde	r the superv	vision of t	eachers	s who direct, s	upervis	e and he	lp them	in the
implementati	ion of scientific re	search,	which	ends w	ith the sub	mission	of a wri	tten scientific	paper	and an c	ral and	poster
presentation.	Classical delivery	of class	ses (ex	-chair) i	s minimize	d in this d	ourse a	nd is based or	n the pr	inciples	of the B	ologna
process, whic	h is working in sm	all grou	ıps wit	h the a	ctive involv	ement of	the stu	dent who is a	t the ce	nter of t	he teacl	ning as
a dynamic an	d not a passive pa	rticipar	nt. Stuc	dents ar	e also taug	ht the ba	sics of c	ommunicatio	n skills i	n scienc	e, espec	ially in
public speaki	ng and how scient	ific rese	earch i	s preser	nted.				C 11			
According to	the Rulebook on s	studying	g at the	e Univei	rsity of Mos	star, the i	inal gra	de is assigned	as folio	ows:		
0-54%, Insum 55-66% suffi	cient (1);											
67-78% good	(2),											
9- 90%. verv s	good (4):											
91-100%, exc	ellent (5).											
The written t	test consists of 30) writte	n ques	stions o	f the multi	ple-choic	e type v	with one corre	ect ans	wer. The	e minim	um for
passing is 60%	% of correctly solv	ed ques	stions.									
The evel was	contotion include	a tha m		tation	of colontific		h world	according to	. +h.a. m	rinciplo	ممعانهما	hla far
nresentations	s at the congres	ses Fa	nesen ich sti	ident d	aroun nres	ents the	ir scien	tific research	n result	s with	application	orPoint
presentation	and answers the	auestio	ns of f	ellow st	tudents and	d teacher	s with a	final poster i	oresent	ation (5)	0% of th	ne final
grade).	grade).											
, , , , , , , , , , , , , , , , , , ,												
The final grad	de is calculated as	the tot	al sum	n of poir	nts achieve	d during a	active at	ttendance at o	lasses	(share of	points	gained
in the final gr	ade 20%), grades	of the	final p	aper an	d oral/post	ter prese	ntation	(share of poir	nts achi	eved in t	the final	grade
50%), and the	e results of the wr	itten te	st (sha	re of ac	quired poir	nts in the	final gra	ade 30%).				

Study	MEDICAL STUDIES IN ENGLISH										
programme											
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module									
Year of study	1	Semester	1								
Course title	MEDICAL ETHICS	Course code	MFMSE105								
ECTS	2	Status	OBLIGATORY								
	Teaching hours		Lectures	Exercises	Seminars	Practice					
			20	0	25	0					
Course objectives	The aim of this cou medical deontolog means of dealing v and publications e understand the de	Irse is to fami y, as well as t vith them. Ad thics, as well a velopment of	liarize students with basi o enable them to identif ditionally, students will f as procedures for ethics human and patients' rig	ic principles of eth y moral dilemmas amiliarize themse assessment of res hts movements.	nics, medical eth in medicine, an lves with specif earch proposals	nics and nd provide ics of research s, and					
	Learning outcome	earning outcome (LO) Course LO code at the									
Course learning	Student:	ent: learning study program outcome code level									
outcomes	Understands the	differences b	etween ethics, medical	ethics, medical	IU-	IU-MSE12					
	deontology, and la	W.			MFMSE105-1						
	Understands the medical deontolog	history of d y, as well as p	evelopment of physicia batient and human rights	ans' oaths and	IU- MFMSE105-2	IU-MSE12					
	Acquaint themsel	ves with th	e important internatio	nal documents	IU-	IU-MSE12					
	related to human	rights and	medical ethics: General	Declaration of	MFMSE105-3						
	Human rights, Eur	opean Declara	ation of Human Rights, H	ippocratic oath,							
	The Deceleration	of Geneva, Th	ne Declaration of Helsin	ki, Good clinical							
	practice.	ands the me	st common wave of a	Idroccing moral							
	dilemmas in medic	ine.	St common ways of ac	uressing moral	MFMSE105-4	10-1013212					
	Practices obtaining	g and explaining	ng basic informed consei	nt to a patient.	IU- MEMSE105-5	IU-MSE16 IU-MSE17					
	Understands and d	ebates ethica	l dilemmas related to: be	ginning and end	IU-	IU-MSE12					
	of life matters, ger	etic testing, r	eproductive medicine, sp	port and doping,	MFMSE105-6	IU-MSE13					
	mental illness, vu	Inerable grou	ips, consent and assen	t to treatment,							
	medical errors, rig	hts to privac	y, research integrity, an	imal rights, and							
	stem cell research.										
	Understands the v	alue and imp	ortance of research ethi	cs and research	IU-	IU-MSE7					
	integrity and data	protection.			MFMSE105-7	IU-MSE12					
Dravanuisitaa		the Duleheel				unity of Mantau					
for the course	In accordance with	the Rulebook	con the integrated Studie	es at the School of	weatche Unive	ersity of wostar.					
enrolment											
emonnent	Week / shift	Tor	nic								
Course content	Lecture 1 (2h)	Intr	oduction to ethics and n	noral developmen	t						
	Lecture 2 (2h)	Me	dical deontology	<u> </u>	-						
	Lecture 3 (2h)	Har	ndling ethical dilemmas								
	Lecture 4 (2h)	Ani	mal rights and laborator	y research							
	Seminar 1 (3h)	Pat	ient-doctor relationship	·							
	Seminar 2 (3h)	Арг	olying basic ethical princi	ples in practice							
	Seminar 3 (3h)	Info	ormed consent								
	Seminar 4 (3h)	lssu	ies related to the beginn	ing and end of life	2						
	Seminar 5 (3h)	Me	dicine of the future								
	Seminar 6 (3h)	Cas	e studies I								
	Seminar 7 (3h)	Cas	e studies II								
	Seminar 8 (3h)	Ref	lection and re-evaluation	า							
	Lecture 5 (2h)	Hist	tory of human experime	ntation							
	Lecture 6 (2h)	Pat	ient rights								
	Lecture 7 (2h)	Vul	nerable groups								

		Lecture 8 (2h)		Disas	ters								
		Lecture 9 (2h)		Resea	Research and publication ethics								
		Lecture 10 (2	h)		Data	protection								
		Seminar 9 (2	า)		Resea	arch integri	ty I							
		Seminar 9 (21	า)		Resea	arch integri	ty II							
Language		English												
E-learning		None												
methods		Lectures, mo	derated	i group) discus	sions and c	lebates, d	case ana	lyses and disc	cussions	s, rolepia	ay.		
				Ту	pes of	assessmen	t (indicat	e - Bold)						
		Type of p	ore-exa	minati	on oblig	gation				Тур	e of exa	m		
midterm	sem	inar essay/re	eport	pra	ictical/p	project task	(other	written	1	oral	prac	ctical	
	pap	ber				OTO IN			exam		exam			
Stude	at ab	igations	A	llocati	on of E	LIS credits	and shar	e in the	grade Shara ii	~ FCTC		hara in a	rada	
Stude	nt ob	ligations	Lt	earning	s do	Hours	S OT WORKI	oad	Share I	n ECIS	5	nare in g	grade	
Regular co	nirco	attendance	IU-MI	EMSE1()5-1		45		1	5		25%		
Regular co	Juise	attendance	10 111	2, 3	,5 1,		45		1.	5		2370		
Sem	inar i	report	IU-MI	FMSE10)5-4,		10		0.3	33		25%		
Essav	(maii	n exam)	IU-MF	MSE10	5-6,7		5		0.1	17		50%		
,		In total					60		2	2		100%	, D	
				М	ethod (of calculati	ng the fin	al grade	2					
Course atte	ndan	ce (25%, passir	ng 14%)	+ Sem	inar re	port (25%,	passing 1	4%) + Es	ssay (50%, pa	ssing 28	3%).			
	- 44	Church - Dis surfact		- f t										
According t	o the	Study Regulat	ions, th	e finai	grade i	s obtained	as tollow	s:						
0 - 54% IIIS 55 - 66% si	unicie	$\operatorname{int}(1)$												
67 – 78% g	bod (3	3)												
79 – 90% ve	ery go	od (4)												
91 - 100%	excell	ent (5)												
Literature		Title		Ed	ition		Lan	guage			Type of	literatur	e	
(indicate)		(title, author, y	/ear)	own	other	Croatian	English	other	multilingual	book	article	script	other	
	N	ledical Ethics					Х			Х				
	N	1anual. World												
	N	1edical Associa	tion,											
	2	U15.					V						V	
		ne Universal	uman				^						^	
	R	ights	uman											
	E	uropean Conve	ention				х						х	
	0	n Human Right	S											
	T	he Declaration	of				Х						х	
		eisiiiki ationts' rights i	n tha				x						x	
	F	uropean Union	ii the				^						~	
	D	irectorate-Gen	eral											
	fc	or Health												
	a	nd Food Safety												
	(E	uropean												
	C	ommission)	- 6				N N						V	
	E	uropean Code	ot 				X						X	
		unduct for Kes	earch											
Additional	P	rinciples of					x			x	<u> </u>			
	B	iomedical Ethio	cs.											
	B	eauchamp and												
	С	hildress. 7th												

	edition. 2013.										
	Resolving Ethical				Х			Х			
	Dilemmas: A Guide										
	for Clinicians, Bernard										
	Lo, 2015.										
Additional cou	urse information										
For the semin	ar "Medicine of the futur	e", stu	dents h	ave a task	to write a	a brief r	eport about w	hat the	ey see as	the futu	ure of
medicine, alo	ng with an example of the	e applio	cation o	f a novel t	echnolog	y in meo	dicine.				

	MEDICAL STU	IEDICAL STUDIES IN ENGLISH								
programme		Turn								
Cycle	INTEGRATED	Туре	2	UNIVERSITY						
Study track	-	Mod	lule	-						
Year of study	1	Sem	ester	1						
Course title	CROATIAN LANGUAGE I	Cou	se	MFMSE106						
ECTS	1	Stat	JS	OBLIGATORY						
	Teaching hour	rs		Lectures	Ex	ercises	Seminar	s Practice		
				0		0	25	0		
Course objectives	- to a com <i>Refe</i> - to re	oply gramn petence at <i>rence for L</i> cognize cu come (LO)	natical str the A1 a anguage. Itural fea	ructures in the Croa nd A2 levels (accor s) atures of the Croatia	atian langua ding to the G an speaking	ge and vocab Common Euro area	oulary for ac opean Fram Course	cquiring language nework of		
Course learning	Student:					o	learning utcome code	study program e level		
outcomes	Applies the b to the conter	asics of pho it of the co	onology, ı urse	morphology and sy	ntax of the C	L related II	J- //FMSE106-1	IU-MSE14 IU-MSE19		
	Demonstrate	Demonstrates basic conversational skills IU- IU-MSE14 MFMSE106-2 IU-MSE19								
	Demonstrate	s reading a	nd writin	ig of simple texts			J-	IU-MSE14		
		-		<u> </u>		N	IFMSE106-3	IU-MSE19		
	Applies topic	-related vo	cabulary			IL	J-	IU-MSE14		
	Deservises			. Creation analyin		N	/IFMSE106-4	IU-MSE19		
	Recognizes ci	ultural leat	ules of th	le croatian speakin	ig al ea	N	JFMSE106-5	IU-MSE19		
Prerequisites for the course	In accordance	e with the F	ulebook	on the Integrated S	Studies at the	e School of M	edicine Uni	versity of Mostar.		
emonnent	Week / shift		iqoT	ic						
Course	1.		Pers	sonal pronouns.						
content	2.									
	2		The	verb <i>biti</i> : affirmativ	ve, negative	and interrog	ative.			
	3.		Nou	verb biti: affirmativ ins: grammatical ge	ve, negative ender.	and interrog	ative.			
	<u> </u>		Nou Croa	verb biti: affirmativ Ins: grammatical ge atian Alphabet. Cap	ve, negative ender. pital Letters.	and interrog	ative.			
	<u> </u>		Nou Croa Poss	verb <i>biti</i> : affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C	ve, negative ender. pital Letters. Capitalizing t	and interrog he pronoun i	ative. n formal sit	uations.		
	3. 4. 5. 6.		Ine Nou Croa Poss The	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe	ve, negative ender. bital Letters. Capitalizing t ers.	and interrog he pronoun i	ative. n formal sit	uations.		
	3. 4. 5. 6. 7.		Ine Nou Croa Poss The The	verb biti: affirmativ ns: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad	ve, negative ender. Dital Letters. Capitalizing t ers. djectives.	and interrog he pronoun i	ative. n formal sit	uations.		
	3. 4. 5. 6. 7. 8.		TheNouCroatPossTheThePoss	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives.	ve, negative ender. Dital Letters. Capitalizing t ers. djectives.	and interrog he pronoun i	ative. n formal sit	uations.		
	3. 4. 5. 6. 7. 8. 9.		TheNouCroatPossTheThePossPress	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a	ve, negative ender. bital Letters. Capitalizing t ers. djectives. m). Accusati	and interrog he pronoun i ve case.	ative. n formal sit	uations.		
	3. 4. 5. 6. 7. 8. 9. 10.		TheNouCroaPossTheThePossPressLong	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural.	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. um). Accusati	and interrog he pronoun i ve case.	ative. n formal sit	uations.		
	3. 4. 5. 6. 7. 8. 9. 10. 11.		TheNouCroatPossTheThePossPressLongThe	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. um). Accusati	and interrog he pronoun i ve case.	ative. n formal sit + accusativ	ruations.		
	3. 4. 5. 6. 7. 8. 9. 10. 11. 12.		Ine Nou Croa Poss The The Poss Pres Long The The	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemen purpose of movemen	ve, negative ender. bital Letters. Capitalizing t ers. djectives. um). Accusati nt: preposition nent: prepos	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	n formal sit	ruations.		
	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.		Ine Nou Croa Poss The The Poss Pres Long The The	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movemer e expressions.	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: prepositio nent: prepos	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	ative. n formal sit + accusativ cusative cas	ruations.		
	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.		Ine Nou Croa Poss The The Poss Pres Long The The The Time Pres	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movem e expressions. sent tense (-iti > -im	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nent: preposition n, -jeti > -im)	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	ative. n formal sit + accusativ cusative cas	re case. re.		
language	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English		TheNouCroadPossTheThePossPressLongTheTheThePressPressPressPressPress	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movemer purpose of movemer sent tense (-iti > -im sent tense of the ve	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nent: preposition nent: preposition n, -jeti > -im) erbs <i>jesti</i> and	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	n formal sit	e case.		
Language F-learning	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English	e with stud	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres Pres	verb <i>biti</i> : affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb <i>imati</i> . Numbe pronoun <i>kakav</i> . Ad sessive adjectives. sent tense (- <i>ati</i> > - <i>a</i> g plural. target of movemer purpose of movemer purpose of movem e expressions. sent tense (-iti > -im sent tense of the ve	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: prepositio nent: prepositio nent: prepositio n, -jeti > -im) erbs <i>jesti</i> and	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	n formal sit + accusativ cusative cas	ruations.		
Language E-learning Teaching	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance	e with stud	Ine Nou Croa Poss The The Poss Pres Long The The The Tres Pres y regulat	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movem e expressions. sent tense (-iti > -im sent tense of the ve	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nt: preposition nt: preposition ent: preposition n, -jeti > -im) erbs <i>jesti</i> and %).	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	n formal sit	ruations.		
Language E-learning Teaching methods	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance - Teac - Inte	e with stud ching meth ractive met	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres Pres y regulat	verb <i>biti</i> : affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb <i>imati</i> . Numbe pronoun <i>kakav</i> . Ad sessive adjectives. sent tense (- <i>ati</i> > - <i>a</i> g plural. target of movemer purpose of movemer purpose of movemer sent tense (-iti > -im sent tense (-iti > -im sent tense of the ve	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nt: preposition nt: preposition n, -jeti > -im) erbs <i>jesti</i> and %).	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	ative. n formal sit + accusativ cusative cas	e case.		
Language E-learning Teaching methods	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance - Teac - Inte	e with stud ching meth ractive met	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres Pres y regulat ods hods Types o	verb <i>biti</i> : affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb <i>imati</i> . Numbe pronoun <i>kakav</i> . Ad sessive adjectives. sent tense (- <i>ati</i> > - <i>a</i> g plural. target of movemer purpose of movemer e expressions. sent tense (-iti > -im sent tense of the ve ions (up to max 209 f assessment (indic	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati net: preposition nent:	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc piti.	ative. n formal sit + accusativ cusative cas	e case.		
Language E-learning Teaching methods	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance - Teac - Inte	e with stud ching meth ractive met	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres Pres y regulat ods hods Types o ation obl	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movem e expressions. sent tense (-iti > -im sent tense of the ve ions (up to max 209 f assessment (indic ligation	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nt: preposition nt: preposition ent: preposition n, -jeti > -im) erbs <i>jesti</i> and %).	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc	ative. n formal sit + accusativ cusative cas Type of e	re case.		
Language E-learning Teaching methods midterm	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance - Teac - Inte Type of p minar aper	e with stud ching meth ractive met pre-examin	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres y regulat ods hods Types o ation obl practical/	verb <i>biti</i> : affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb <i>imati</i> . Numbe pronoun <i>kakav</i> . Ad sessive adjectives. sent tense (- <i>ati</i> > - <i>a</i> g plural. target of movemer purpose of movemer purpose of movemer sent tense (-iti > -im sent tense (-iti > -im sent tense of the ve ions (up to max 209 f assessment (indic ligation /project task	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nt: preposition nt: preposition n, -jeti > -im) erbs <i>jesti</i> and %).	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc <i>piti</i> .	ative. n formal sit + accusativ cusative cas Type of e oral exam	re case.		
Language E-learning Teaching methods midterm ser	3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English In accordance - Teae - Inte Type of primar aper	e with stud ching meth ractive met pore-examin port cport	Ine Nou Croa Poss The The Poss Pres Long The The Time Pres Pres Pres y regulat ods hods Types o ation obl practical/	verb biti: affirmativ ins: grammatical ge atian Alphabet. Cap sessive pronouns. C verb imati. Numbe pronoun kakav. Ad sessive adjectives. sent tense (-ati > -a g plural. target of movemer purpose of movemer purpose of movemer e expressions. sent tense (-iti > -im sent tense of the ve ions (up to max 209 f assessment (indic ligation /project task ECTS credits and sh	ve, negative ender. Dital Letters. Capitalizing t ers. djectives. m). Accusati nt: preposition nt: preposition nt: preposition nt: preposition n, -jeti > -im) erbs <i>jesti</i> and %). Cate - Bold) other	and interrog he pronoun i ve case. ons <i>u</i> and <i>na</i> ition <i>po</i> + acc <i>piti</i> .	ative. n formal sit + accusativ cusative cas Type of e oral exam	e case.		

Attending	classes and		-			25		0,	8		20 %		
preparing	for the exam												
		IU-MF	MSE10)6-1									
		IU-MF	MSE10	06-2									
Pre-exam	/Final exam	IU-MF	MSE10	06-3		5		0,	2		80 %		
		IU-MF	MSE10	06-4									
		IU-MF	MSE10	06-5									
	In total					30		1			100%)	
			M	ethod c	of calculati	ng the fin	al grade	<u> </u>					
Attending cla	sses and preparing	for the	exam	•		0	0.0.0	-					
- irregular arr	ivals – 0% of the fi	inal gra	. chuin do	•									
				.									
- regular arriv	als without activitie	es = 11	% OT ti	ne final	grade								
- activity only	at the teacher's ins	stigatio	on = 14	1% of th	e final grad	de							
- self-initiated	l activity = 17% of t	he fina	l grade	e									
- self-initiated	l activity with quali	ty discu	ussion	= 20% (of the final	grade							
Pre exam or f	or final written/oral exam:												
less than 55%	5% correct answers = 0% of the final grade												
55% - 66% co	% correct answers = 0% of the final grade correct answers = 44% of the final grade												
67% - 78% co	prrect answers = 44% of the final grade prrect answers =56% of the final grade												
79% - 90% co	correct answers =56% of the final grade correct answers = 68% of the final grade												
91% - 100% c	orrect answers = 8	0% of t	he fin	al grade	2								
			2	0.200									
According to t	the Study Regulation	ons the	final	orade is	obtained	as follow	c٠						
0 = 54% insuf	ficient (1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. miai	grade is	obtained		5.						
0 = 5470 msuff	isiont (2)												
55 - 66% Sull	rcient (2)												
67 – 78% goo	a (3)												
79 – 90% very	v good (4)												
91 – 100% exe	cellent (5)												
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Study	MEDICAL STUDIES	IN ENGLISH				
programme						
Cycle	INTEGRATED	Туре	UNIVERSITY			
Study track	-	Module	-			
Year of study	1	Semester	11			
Course title	MEDICAL	Course code	MFMSE201			
	CHEMISTRY AND					
	BIOCHEMISTRY I					
ECTS	7.5	Status	OBLIGATORY			-
	Teaching hours		Lectures	Exercises	Seminars	Practice
			32	26	22	0
Course	- train students to	apply basic kr	nowledge about chemica	I structure and ph	ysicochemical p	orocesses,
objectives	which are necessa	ry for underst	anding biochemical and	physiological proc	cesses	
	- achieve the stude	ent's understa	nding of the basic princi	ples and mechanis	sms of reactions	s of simple and
	complex organic/t	oiological mole	ecules			
	- train students to	apply classica	l and instrumental meth	ods of chemical a	nalysis	
	- train students to	interpret resu	lts and experimentally d	etermined chemi	cal changes usir	g theoretical
	chemical laws					
	Learning outcome	(LO)			Course	LO code at the
Course	Student:				learning	study program
learning					outcome code	level
outcomes	Explains the theor	y of aqueous s	solutions, electrolytes, ne	on-electrolytes,	IU- MEMSE201 1	IU-MSE1
	and physical laws.					
	Analyzes chemical	processes acc	cording to the concepts o	of chemical	IU-	IU-MSE1
	thermodynamics,	kinetics, and e	equilibrium		IVIFIVISE201-2	
	Solves calculation	problems in c	hemistry and interprets	results using	IU-	IU-MSF1
	theoretical chemic	al laws			INIFINISE201-3	
	Classifies organic i	nolecules imp	ortant for the constructi	on of biological	IU-	
	macromolecules, a	and correlates	the properties of molec	ules (based on	MFMSE201-4	IU-MSE1
	chemical structure	e) and the mee	chanisms of chemical cha	inges.		
	Applies physicoch	emical quantit	ies and methods used in	biomedical	IU-	IU-MSF1
	sciences.				IVIFIVISE201-5	
	Independently cal	culates and ex	plains the results of che	mical analysis.	IU-	IU-MSE1
					MFMSE201-6	
Prerequisites	In accordance with	the Rulebool	on the Integrated Studi	es at the School of	f Medicine Univ	ersity of Mostar
for the course			con the integrated stadi			croity of mostar
enrolment						
	Week / shift	Тор	bic			
Course content	L2	Mo	lecular structure and	chemical bond,	bioelements, c	hemical bonds
		bet	ween biomolecules, basi	ic elements of livi	ng matter	
	L4	Wa	ter as the solvent. Th	ne distribution o	of the substan	ce in solution.
		Ele	ctrolytes. The acids and b	base. Buffers.		
	L6	Col	ligative properties. The	osmotically acti	ve particles. Co	olloid-dispersed
		sys	tems. Precipitation react	ions. Colloids and	macromolecule	es.
	L8	The	ermodynamics and therm	nochemistry. Ther	modynamic Lav	vs. Internal
		ene	ergy. Enthalpy. Entropy. (Gibbs's energy.		
	L10	Ene	ergy of biological systems	s. Energy balance	of biochemical s	systems.
	L12	Che	emical equilibrium. The	influence of co	ncentration, te	mperature and
		pre	ssure on the chemical	balance. The ec	uilibrium const	ant and Gibbs
		ene	ergy.			
	L14	Che	emical kinetics. The spee	ed of reaction. Or	der and molec	ularity reaction.
	146	Fac	tors affecting the rate of	reaction. Enzyme	es. Complex read	ctions.
		Ele	ctrocnemistry. Electrode	potential and ele	ctrocnemical ce	115.
	L1/	Gib	bs energy of redox react	ions. The biologic	al redox system	S.

		L18			Introduction to Organ	nic Chemistry.	Classification of	f organic cor	npounds. The				
					functional groups.								
		L19			Alkanes and cycloalka	anes. Stereoch	emistry.						
		L20			Alkenes and alkynes.								
		L21			Aromatic compounds	5.							
		L22			The alkyl halides. Nuc	cleophilic subs	titution at satur	ated carbon	. Elimination				
	_				reactions.								
		L23			Alcohols, ethers, thio	ls, sulfides. Cl	assification and	physical pro	operties of				
					alcohol. Biologically i	mportant alco	hols and pheno	ls.					
		L24			Oxidation and reduct	ion of carbony	/l compounds.						
	_	L25			Aldehydes and keton	es. Nucleophil	ic addition reac	tion.					
		L26			Carboxylic acid and	derivatives.	Physical Prope	rties. The a	cidity of the				
	-	1.20			Carbohydrates, Nucleosides, nucleotides and nucleic acids. Classification								
		LZð			Carbohydrates. Nucleosides, nucleotides and nucleic acids. Classification.								
					Fisher's formula. Epimers. Redox reactions of monosaccharides. Straight-								
					chain and cyclic form	s. Anomeric ca	arbon atom. Mu	itarotation. I	laworth				
					formula. Glycosides.	Reducing and	non-reducing su	igars. Disacc	harides.				
	-	120			Polysaccharides. Nuc	leosides, nucle	eotides and nuc	leic acids.					
		L30			Amino acids and pro	nd tortion, pr	configuration.	Zwitterion. I	Peptide bond.				
					chemical properties	of lipids	otem structure.	Elizyilles. Li	pius. Physico-				
	-	53			Calculation problems	in chemistry -	solutions						
	_	55			a pH of acids bases a	ind salts	5010110113.						
		59			pH of buffers								
		S11			Colligative properties								
	_	S14			Thermodynamics and	I thermochem	istry						
		S15			Electrochemistry.		,						
		S17			Nomenclature. Isome	erism.							
		S18			Stereochemistry. Chi	rality. Stereois	somers: enantic	mers and d	iastereomers.				
					Fisher projection form	nula. CIP syste	em nomenclatur	e.					
		S19			Substitution, eliminat	tion, oxidation	, reduction.						
	_	S20			Addition at carbonyl	carbon.							
	_	S21			Acyl substitution.								
	_	S22			Bioorganic compound	ds.							
	_	V1			Laboratory equipmer	nt and basic lal	boratory techni	ques.					
	_	V2			Preparation of the so	lutions.							
	-	V3			Optical methods								
		V4			Colloids	C							
		V5 V6			Osmotic resistance of	r erythrocytes	fluoneo of the	addition of a	strong asid /				
		V0			buriers; the burier c	apacity; the in			strong acid /				
					to buffer pH value								
	-	V7			Volummetry: Acid-ba	se titration							
		V8			Classification tests of	functional gro	oups						
	-	V9			Synthesis of aspirin	0							
		Engl	ish		<u> </u>								
Language													
E-learning		Clas	ses are conduct	ed in pe	erson (live). If necessar	y, lectures, ser	minars and part	of the exerc	ises can be				
		com	bined (live and	online)	or completely online vi	a e-learning p	latforms (Googl	e Meet) up t	o a maximum				
		20%	•										
Teaching		- lec	ture, presentat	ion									
methods		- fre	e and guided co	onversat	ion, dialogue, discussio	on							
		- wo	ork in the labora	tory									
			_	Ту	pes of assessment (ind	icate - Bold)							
			Type of pre-exa	aminatio	on obligation	01	1	ype of exam					
materm	semin	dſ	essay/report	pra	ctical/project task	other	written	IGIO	practical				
	Pahe	. 1					Chain	слатт					

Allocation of ECTS credits and share in the grade											
Student	obligations	Learning	; nde	Hours	of workl	oad	Share ii	n ECTS	Sł	nare in g	rade
Attendi	ing classes	-	Juc		80		2	7		0%	
Mic	lterm I				00		2.	,		0/0	
(calculatio	n problems in II	-MFMSE20	01-3		30		1			20%	
general/phy	sical chemistry)										
Mid	term II										
(properties ar	nd reactions of an II	J-MFMSE20	01-4		30		1			20%	
Mid	torm III II	I-MFMSF20)1-5								
(exe	ercises)	-MFMSE20	01-6		10		0.	3		10%	
	IL	-MFMSE20)1-1								
\\/ritt	en exam	-MFMSE20	01-2		75		2	5		50%	
vviice		I-MFMSE20	01-3		75		2.	5		5070	
	ln total	I-MFMSE20)1-4		225		7	F		1000/	
	in total	N.4	oth o d o	faalaulatii	ZZ5	al grado	7.1	5		100%)
N 41 alt a mag 1 a m		IVI	ethod o	of calculation	ng the fin	ai grade					
Midterm I and	d Midterm II:										
Each max. po	ints: 30										
1-14 - Insuffic	cient (1)										
10-22 good	(2)										
19-22 - g000	(3)										
27-30 - evcel	lont (5)										
27 30 6000											
Midterm III											
Max. points:1	.0										
1-4 - insuffici	ent (1)										
5-6– sufficien	t (2)										
6-7 – good (3)										
8-9 – very goo	od (4)										
10 – excellent	t (5)										
	. ,										
Written exam	:										
Max. points:1	.00										
< 55 insufficie	ent (1)										
55 - 66 - suffic	cient (2)										
67-78 – good	(3)										
79-90 – very §	good (4)										
91-100 – exce	ellent (5)										
Example of fir	nal grade calculation:										
Student gets:											
-4 from the w	ritten exam, (4x0.5)										
-3 from Midte	erm I, (3x0.2)										
-4 from Midte	erm II, (4x0.2)										
-3 from Midte	erm III, (3x0.1)										
Final grade =	(4x0.5)+ (3x0.2)+ (4x0	2)+ (3x0.1	L) = 2 + (0.6 + 0.8 +	0.3 = 3.7	(very go	bod)	1			
Literature	Title	Edi	tion		Lan	guage	I .		Type of l	iteratur	e
(indicate)	(title, author, year	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	K. J. Denniston, J. J.		х		х			х			
	Topping, R. L. Caret,										
	General, Organic, an	d									
	Biochemistry, 4th										
	Edition, McGraw Hill	,									
	New York, 2004.										

	Calculation problems	х		х			х	
	in chemistry, G. Zlatić,							
	I. Martinović, 2019.							
	Laboratory Manual for	х		х			х	
	Medical Chemistry (I.							
	Mikulić and co.), 2019							
Additional	P. W. Atkins and J. de		х	х		х		
	Paula, Physical							
	Chemistry For The Life							
	Sciences, 2nd edition,							
	Oxford University							
	Press, 2011.							
	D. J. Hart, C. M.		х	х		х		
	Hadad, L. E. Craine, H.							
	Hart, Organic							
	Chemistry – A Short							
	Course, 13th Ed,							
	Brooks/Cole, Cengage							
	Learning, Belmont,							
	2012.							
Additional co	urse information							

	MEDICAL STUDIES IN ENGLISH									
programme		_	· · · · · · · · · ·							
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module	-							
Year of study	1	Semester	11							
Course title	PHYSICAL EDUCATION I	Course code	MFMSE202							
ECTS	0.5	Status	OBLIGATORY							
	Teaching hours		Lectures Exe	ercises	Seminars	Practice				
			0	25	0	0				
Course objectives	 To expan- To expan- conseque the prese To expan- to train store of exercise 	d students' know d students' know nces of the effec rvation of health d students' know tudents for indep e in everyday life	vledge about the impact of kir vledge about the general proc cts of these processes on the a achieved through kinesiolog vledge about ways to solve pr bendent work and expand stu	nesiology a cess of exer human boo gy processes roblems rela idents' know	ctivities on the ccise as well as ly with special s. ated to exercis wledge about	e level of health. the reference to se processes. the importance				
	Learning outcome	(LO)	_	Cc	ourse learning	LO code at the				
Course	Student:	()		0	utcome code	study program				
learning		-				level				
outcomes	Applies warm-up	exercises for a pa	rticular kinesiological activity	/. 10-	MFMSE202-1	IU-MSE21				
	Independently an	alyzes and beco	mes aware of the importan	nce of 10-	WIFINISE202-2	IU-MSE21 IU-MSE13				
	It assesses the ne	ed and important	nce of daily exercise in ord	der to IU-	MFMSE202-3	IU-MSE13				
	It creates an actin during free time)	ve break (an ac	tive break between studying	g and IU-	MFMSE202-4	IU-MSE13				
	It presents toleran	ce. work habits a	and self-discipline.	IU-	MFMSE202-5	IU-MSE13				
	· ·	,								
Prerequisites for the course	In accordance with	n the Rulebook o	n the Integrated Studies at the	e School of	Medicine Univ	versity of Mostar				
enrolment										
enrolment	Week / shift	Topic								
Course	Week / shift	Topic Introdu	ctory meeting and familiariza	ation of stu	dents with obl	igations				
enroiment Course content	Week / shift 1. 2.	Topic Introdu Structu	ctory meeting and familiariza re of the Physical Education c	ation of stud	dents with obl	igations				
Course content	Week / shift 1. 2. 3.	Topic Introdu Structu Genera	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th	ation of stud class heir applica	dents with obl	igations				
Course content	Week / shift 1. 2. 3. 4.	Topic Introdu Structu Genera Footbal	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainir	ation of stud class heir applica ng (content	dents with obl tion : and organizat	igations tion)				
Course content	Week / shift 1. 2. 3. 4. 5.	Topic Introdu Structu Genera Footbal Footbal	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I – a modified form of indoor	ation of stud class heir applica ng (content and outdo	dents with obl tion : and organizat or football	igations tion)				
Course content	Week / shift 1. 2. 3. 4. 5. 6.	Topic Introdu Structu Genera Footbal Footbal Handba	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I – a modified form of indoor II - basics of handball game a	ation of stud class heir applica ng (content and outdo nd improve	dents with obl tion and organizat or football ement of new	igations tion) elements				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I – a modified form of indoor II - basics of handball game a all - the basics of the volleyb	ation of stud class heir applica ng (content and outdo and improve ball game a	dents with obl tion and organizat or football ement of new and improvem	igations tion) elements ent of volleyball				
Course content	Week / shift	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training	ctory meeting and familiariza re of the Physical Education of I preparatory exercises and th I - structure of football trainin I - a modified form of indoor II - basics of handball game a all - the basics of the volleyb structures	ation of stud class heir applica ng (content and outdo nd improve ball game a	dents with obl tion and organizat or football ement of new and improvem	igations tion) elements ent of volleyball				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor II - basics of handball game a all - the basics of the volleyb structures all - service, service receptio	ation of stud class heir applica ng (content and outdo nd improve ball game a	dents with obl tion and organizat or football ement of new and improvem hrowing, block	igations tion) elements ent of volleyball k and defense in				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Basketb	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service receptio ball - structure of basketball tr	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor	dents with obl tion and organizat or football ement of new and improvem hrowing, block	igations tion) elements ent of volleyball k and defense in nization)				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service reception d ball - structure of basketball tr ball - a modified mode of bask	ation of stud class heir applica ng (content and outdo nd improve ball game a on, lifting, t raining (cor ketball	dents with obl tion and organizat or football ement of new and improvem hrowing, block	igations tion) elements eent of volleyball k and defense in nization)				
enroiment Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor II - basics of handball game a all - the basics of the volleyt structures all - service, service reception d ball - structure of basketball tr ball - a modified mode of bask forehand shot under the ha	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehan	dents with obl tion and organizat or football ement of new and improvem hrowing, block htent and orga	igations tion) elements ent of volleyball k and defense in nization) the head				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett Tennis diroctio	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service reception ball - structure of basketball tr ball - a modified mode of bask - forehand shot under the ha - high serve and short serv pact and forth	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehan ve and mo	dents with obl tion and organizat or football ement of new and improvem hrowing, block htent and orga ntent and orga	igations tion) elements ent of volleyball k and defense in nization) the head the court in the				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett Tennis directio	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service reception d ball - structure of basketball tr ball - a modified mode of bask forehand shot under the ha - high serve and short serv n back and forth	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehan ve and mo	dents with obl tion and organizat or football ement of new and improvem hrowing, block ntent and orga nd shot above vements on t	igations tion) elements eent of volleyball k and defense in nization) the head the court in the				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett Baskett Tennis directio Walking	ctory meeting and familiariza re of the Physical Education of I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyb structures all - service, service reception d ball - structure of basketball tr ball - a modified mode of bask forehand shot under the ha - high serve and short serv n back and forth g tour - organization of excurs	ation of stud class heir applica ng (content and outdo ind improve ball game a ball game a on, lifting, t raining (cor ketball ind, forehan ve and mo sions in nat	dents with obl tion and organizat or football ement of new and improvem hrowing, block hrowing, block ntent and orga nd shot above vements on t ure	igations tion) elements ent of volleyball k and defense in nization) the head the court in the				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15.	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett Baskett Crennis directio Walking Repetit	ctory meeting and familiariza re of the Physical Education of I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service reception ball - structure of basketball tr ball - a modified mode of bask - forehand shot under the ha - high serve and short serv n back and forth g tour - organization of excurs ion and improvement of gene	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehar ve and mo sions in nat eral prepara chosen by	dents with obl tion and organizat or football ement of new and improvem hrowing, block ntent and orga nd shot above vements on t ure atory exercises the student	igations tion) elements ent of volleyball k and defense in nization) the head the court in the				
Course content	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English	Topic Introdu Structu Genera Footbal Footbal Handba Volleyb training Volleyb the field Baskett Baskett Tennis directio Walking Repetit Repetit	ctory meeting and familiariza re of the Physical Education c I preparatory exercises and th I - structure of football trainin I - a modified form of indoor II - basics of handball game a all - the basics of the volleyk structures all - service, service reception d ball - structure of basketball tr ball - a modified mode of bask forehand shot under the ha - high serve and short serv n back and forth g tour - organization of excurs ion and improvement of gene ion of the learned content as	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehar ve and mo sions in nat eral prepara chosen by	dents with obl tion and organizat or football ement of new and improvem hrowing, block ntent and orga nd shot above vements on t ure atory exercises the student	igations tion) elements eent of volleyball k and defense in nization) the head the court in the				
Enrolment Course content Language E-learning	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English Sumarum, possibili maximum 20 %.	TopicIntroduStructuGeneraFootbalFootbalHandbaVolleybtrainingVolleybthe fieldBasketbBasketbTennisdirectioWalkingRepetitRepetit	ctory meeting and familiariza re of the Physical Education of I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyb structures all - service, service reception all - structure of basketball tr ball - a modified mode of bask - forehand shot under the ha - high serve and short serv n back and forth g tour - organization of excurs ion and improvement of gene ion of the learned content as	ation of stud class heir applica ng (content and outdo ind improve ball game a ball game a on, lifting, ti raining (cor ketball ind, forehan ve and mo sions in nat eral prepara chosen by latform: Go	dents with obl tion and organizat or football ement of new and improvem hrowing, block ntent and orga nd shot above vements on t ure atory exercises the student	igations tion) elements ent of volleyball k and defense in nization) the head the court in the s				
enrolment Course content Language E-learning Teaching	Week / shift 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. English Sumarum, possibi maximum 20 %. - teaching	TopicIntroduStructuGeneraFootbalFootbalHandbaVolleybtrainingVolleybthe fieldBasketbBasketbBasketbTennisdirectioWalkingRepetitRepetitlity of establishi	ctory meeting and familiariza re of the Physical Education of I preparatory exercises and th I - structure of football trainin I - a modified form of indoor III - basics of handball game a all - the basics of the volleyk structures all - service, service reception all - service, service reception all - structure of basketball tra- ball - structure of basketball tra- ball - a modified mode of bask - forehand shot under the ha - high serve and short serv in back and forth g tour - organization of excurs- ion and improvement of gene- ion of the learned content as - for the learned content as - for the learned content as	ation of stud class heir applica ng (content and outdo ind improve ball game a on, lifting, t raining (cor ketball ind, forehar ve and mo sions in nat eral prepara chosen by latform: Go	dents with obl tion and organizat or football ement of new and improvem hrowing, block ntent and orga nd shot above vements on t ure atory exercises the student bogle meet o	igations tion) elements ent of volleyball k and defense in nization) the head the court in the s r Zoom up to a				

	 interactive methods (conversation and agreement about the class and exercises, dialogue, communication about the course and mutual, creative ideas about the contents of the exercises) 												
				Types of a	issessment (ir	dicate - Bold)							
	Type of pre-examination obligation Type of exam												
midterm	semina	ar essa	y/report	practical/pr	oject task	other	written	ora	al	practical			
	paper	·					exam	exa	m				
	Allocation of ECTS credits and share in the grade												
Studen	t obligati	ions	Learn	ing outcome	Hours of workload		Share in EC	TS	SI	hare in grade			
				code									
-			IU-N	IFMSE202-1									
Attend	ding class	ses	IU-N	1FMSE202-2									
preparing	for the p	oractical	IU-N	1FMSE202-3	2	5	0.5			100 %			
			IU-N	1FMSE202-4									
			IU-N	1FMSE202-5									
		In to	al		2	5	0.5			100 %			
	Method of calculating the final grade												

Attending classes and preparing for the practical assignment/exam:

Class attendance and class activities:

- irregular arrivals = 0% grade
- more than 80% attendance at exercises = 100% descriptive grade

Exceptionally for students who are exempted from exercises due to health or sports (top athletes) exemptions, students are required to write a seminar paper.

Writing a seminar paper:

- the paper is not written = 0% grade.
- The work fully meets the formal and content criteria and is grammatically and spelling correct = 100% grade

According to the Study Regulations, the final grade is obtained as follows:

0 – 54% insufficient (1)

55 – 66% sufficient (2)

67 – 78% good (3)

79 – 90% very good (4)

91 – 100% excellent (5)

An exception is the subject of Physical Education, where a descriptive grade of "passed" is included in accordance with regular attendance at exercises.

Literature	Title	Edi	tion		Lan	guage		Type of literature			
(indicate)	(title author year)	014/0	othor	croatian	onglich	othor	multilingual	book	articlo	script	othor
(indicate)	(title, autior, year)	Own	Utilei	croatian	english	other	multilingual	DOOK	article	script	other
Compulsory	Educating the		Х		Х			Х			
	Student Body:										
	Taking Physical										
	Activity and Physical										
	Education to School,										
	Harold W. Kohl III										
	and Heather D.										
	Cook, 2013.										
Additional											
Additional co	urse information										

- The student is obliged to regularly attend exercises from the course.

- The condition for entering the final descriptive grade is met with the attendance of at least 80% of the classes held.

- Exceptional efforts at exercises will be rewarded with additional (accumulation) pluses. The maximum number of accumulation points is 2 plus in the record.

- Unexcused absences must be justified with our student doctor and with a request to the course instructor.

- Exempted students are required to write a seminar paper

Study	MEDICAL STUDIES IN ENGLISH										
programme											
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module	-								
Year of study	1	Semester	11								
Course title	ANATOMY	Course code	MFMSE203								
ECTS	21	Status	OBLIGATORY								
	Teaching hours		Lectures Exercis	es Seminars	Practice						
			60 90	65	0						
objectives	To enable students to understand the structure of the human body.To enable students to acquire knowledge about the structure of the human body through systematic andtopographic anatomy and thus enable them to understand the normal and pathological morphology ofman, the relationship between surface forms and deeper structures and the relationship of thesestructures as a framework for life processes.Clinical importance of individual regions and coping in spatial orientation within the human body.Master in detail the systematic, functional and topographic anatomy of all regions, as well as the functionalanatomy of the locomotor system, cardiovascular, respiratory, digestive, urinary and sexual systems.Systemic anatomy: features of organs, their blood supply and innervation. According to this approach,organs are grouped according to a common function. The emphasis is on general anatomical principlesimportant for understanding the structure and function of the human body.Topographic anatomy: characteristics of organs with regard to their location and interrelationship withsurrounding structures (position in the body). All organs belong to a body system and a specific anatomicalregion.Learning outcome (LO)Course learningLO code at										
	Learning outcome	» (۱ ೧)		Course learning	LO code at						
Course	Student:			outcome code	the study						
learning					program level						
outcomes	Explains the conc	epts of anatomic	al terminology	IU-MFMSE203-1	IU-MSE2 IU-MSE21						
	Describes the sir	nilarities and dis	tinguishes the peculiarities of the	IU-MFMSE203-2	IU-MSE2						
	individual organs	structures of eac	ch of the basic structural groups: a								
	somatic structure	es (skin, fascia, b	ones, joints, muscles), b) viscera								
	structures (solid a	and hollow orgar	is), c) supply and control structures	;							
	(Vascular and ner	vous systems)	ising into verices (secondaria by								
	"anatomic bordor	uman body div c.") doscribos th	ision into regions (separated by		10-IVI3E2						
	anatomical struct	ures (tissues an	d organs) with regard to common								
	functional feature	es, in (organic) sv	stems								
	Applies basic kno	wledge of anator	ny to concrete clinical	IU-MFMSE203-4	IU-MSE1						
	situations	0			IU-MSE8						
	Shows projection	s of clinically rele	evant anatomical structures on	IU-MFMSE203-5	IU-MSE1						
	normal, living bo	dy and connects	the peculiarities of structure with	1							
	function of ind	dividual anaton	nical structures (for important	:							
	movements, activ	vities, reflexes)									
	Compares anaton	nical sections of a	anatomical structures with different	IU-MFMSE203-6	IU-MSE2						
	radiological meth	ods			IU-IVISE8						
	Describes anaton heights and direct	nical structures	on body sections in various body	1U-MFMSE203-7	IU-MSE1						
	Explains and nam	nes parts of isola	ted and/or dissected organs of the	IU-MFMSE203-8	IU-MSE1						
	body.										
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	l.		.: BONES AND JOINTS OF THE TRUN	NK.							

Course		Lecture 1: Introduction to anatomy, principles of osteology and syndesmology
content		Seminar 1: Vertebral column, ribs and sternum
		Exercise 1: Bones and joints of the trunk
	11.	UNIT 2: BONES AND JOINTS OF THE UPPER LIMB – PECTORAL REGION AND
		SHOULDER GIRDLE
		Seminar 2: Bones of shoulder girdle and shoulder joints
		Exercise 2: Bones of shoulder girdle and shoulder joints and arm
	ш	UNIT 3: RADIOLOGICAL ANATOMY
		Lecture 2: Principles of radiological anatomy
		Exercise 3: Orientation points on the body Radiological anatomy of axial
		skeleton and shoulder regions
	11/	LINIT A' BONES AND JOINTS OF THE LIDDER LIMB - FOREARM AND HAND
	10.	Seminar 3: Bones and joints of the forearm and hand
		Evercise 4: Rones and joints of the forearm and hand
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	v.	THICH
		Cominer 4: Denos and joints of the hin and thigh
	NA	Seminar 4: Bones and joints of the hin and thigh
	VI.	
		UNIT 6: BONES AND JUINTS OF THE LOWER LIMB – LEG AND FOUT
		Seminar S: Bones and joints of the leg and foot
		Exercise 6: Bones and joints of the leg and foot
	VII.	UNIT 7: NEUROCANIUM
		Lecture 3: Cranial bones and aspects of cranium
		Seminar 6: Orientation points on the cranium. Neurocranial bones and aspects
		of neurocranium
		Exercise 7: Neurocranial bones
	VIII.	UNIT 8: VISCEROCRANUIM
		Seminar 7: Viscerocranium
		Exercise 8: Viscerocranial bones and aspects of viscerocranium
	IX.	UNIT 9: PRINCIPLES OF ORGANIZATION OF THE CENTRAL NERVOUS SYSTEM
		Lecture 4: Organization of the central nervous system
		Seminar 8: Cerebrum and cerebellum
		Exercise 9:Sectional anatomy of the central nervous system
	х.	UNIT 10: SPINAL CORD AND SPINAL NERVES
		Lecture 5: Spinar coru and spinar nerves
		Seminar 9: Somatic and autonomic nervous systems
		Exercise 10:Spinal nerves and somatic plexuses, structure and organisation
	XI.	UNIT 11: BASIS OF THE BRAIN AND CRANIAL NERVES
		Lecture 6. Brainstern and cranial nerves
		Seminar 10. Organisation of cranial nerves
		exercise 11. Cranial nerve exits at brain basis and cranium, cranial nerve nucleus
	XII.	UNIT 12: VENTRICULAR SYSTEM AND BLOOD VESSELS OF THE BRAIN
		Lecture 7: Blood vessels of the brain, spinal cord and CSF
		Seminar 11: Blood brain circulation in the central nervous system
		Exercise 12: venous sinuses, blood vessels of the brain, spinal cord and
		meninges, ventricular system of CNS
	XIII.	UNIT 13: PRINCIPLES OF CARDIO-VASCULAR SYSTEM AND HEART
		Lecture 8: Principles of cardiovascular system and heart, circulation
		Seminar 12: Heart
	AIV.	UNIT 14: PRINCIPLES OF VISCERAL SYSTEMS
		Lecture 9: Principles of the organization of Visceral organs
		Exercise 14: Position and structure of visceral organs
	۸۷.	
		Lecture 10: Regio parotideomasseterica et buccalls
		Seminar 13: Regio parotideomasseterica et duccalis
		Exercise 15: Regio parotideomasseterica et regio buccalis – section
	XVI.	UNIT 16: EPICKANIUM ET REGIO TEMPORALIS

	Lecture 11: Epicranium et regio temporalis
	Seminar 14: Auris
	Exercise 16: Regio temporalis et auricularis – section
XVII.	UNIT 17: REGIO ORBITALIS
	Lecture 12: Regio orbitalis
	Seminar 15: Orbita et oculus
	Exercise 17: Regio orbitalis – section
XVIII.	UNIT 18: REGIO NASALIS, FOSSA INFRATEMPORALIS ET PTERYGOPALATINA
	Lecture 13: Regio nasalis
	Seminar 16: Nose and paranasal sinuses. Fossa infratemporalis et
	pterygopalatina
	Exercise 18: Facies, fossa pterygopalatina et fossa infratemporalis- section
XIX.	UNIT 19: REGIO ORALIS ET MENTALIS. TRIGONUM SUBMANDIBULARE
	Lecture 14: Cavum oris et trigonum submandibulare
	Seminar 17: Oral cavity
	Exercise 19: Trigonum submandibulare – section
XX.	UNIT 20: TRIGONUM CAROTICUM
	Lecture 15: Trigonum caroticum
	Seminar 18: Pharvnx
	Exercise 20: Trigonum caroticum et pharynx – section
XXI.	Lecture 16: Trigonum musculare
	Seminar 19 [.] Larvnx
	Exercise 21: Trigonum musculare et fossa jugularis – section
XXII	
	Lecture 17: Regio cervicalis lateralis
	Seminar 20: Regio cervicalis lateralis
	Exercise 22: Regio cervicalis lateralis – section
XXIII.	UNIT 23: REGIO PECTORALIS ET FOSSA AXILLARIS
	Lecture 18: Regio pectoralis et fossa axillaris
	Seminar 21: Muscles of shoulder girdl and axilla
	Exercise 23: section of axilla
XXIV.	UNIT 24: TOPOGRAPHIC ANATOMY OF ARM
	Lecture 19: Topographic anatomy of arm
	Seminar 22: Muscles of arm and elbow region
	Exercise 24: Section of arm and elbow region
XXV.	UNIT 25: TOPOGRAPHIC ANATOMY OF FOREARM AND HAND
	Lecture 20: Topographic anatomy of forearm and hand
	Seminar 23: Muscles of forearm and hand and carpal tunnel
	Exercise 25: Section of forearm and hand
XXVI.	UNIT 26: TOPOGRAPHIC ANATOMY OF THORACIC CAVITY
	Lecture 21: Mediastinum
	Seminar 24: Lungs and bronchi
	Exercise 26: Section of thoracic region
XXVII.	UNIT 27: ABDOMINAL WALL AND INGUINAL CANAL
	Lecture 22: Abdominal wall and inguinal channel
	Seminar 25: Projections of abdominal organs on the abdominal wall
	Exercise 27: Anatomical section and demonstration
XXVIII.	UNIT 28: PERITONEUM AND MESENTERY
	Lecture 23: Peritoneum and mesentery
	Seminar 26: Spaces in the abdominal cavity
	Exercise 28: Anatomical section and demonstration
XXIX.	UNIT 29: TOPOGRAPHIC ANATOMY OF ABDOMINAL CAVITY
	Lecture 24: Topographic anatomy of the stomach, duodenum, small and large
	intestine
	Seminar 27: Abdominal organs
	Exercise 29: Section of stomach, duodenum, small and large intestine
XXX.	UNIT 30: TOPOGRAPHIC ANATOMY OF BACK
	Lecture 25: Topographic anatomy of back
	Seminar 28: Back muscles

					Exercise	e 30: Sectio	on of bac	k muscle	25				
	XXXI.				UNIT 31	L: TOPOGR	APHIC A	NATOM	Y OF RETROP	ERITON	AL ORG	ANS	
					Lecture	26: Topog	raphic ar	natomy	of retroperito	neum			
					Semina	r 29: Kidne	eys and u	reters					
					Exercise	e 31: Sectio	on of retr	operito	neum				
	XXXII				UNIT 32	2: TOPOGR	APHIC A	NATOM	Y OF FEMALE	PELVIS			
					Lecture	27: Topog	raphic ar	natomy	of female pelv	ris			
					Semina	r 30: Fema	le reproc	luctive o	organs				
					Exercise	e 32: Anato	omical se	ction an	d demonstrat	ion			
	XXXII	Ι.			UNIT 33	B: TOPOGR	APHIC A	NATOM	Y OF MALE PI	ELVIS			
					Lecture	e 28: Topographic anatomy of male pelvis							
					Semina	r 31: Male	reproduc	ctive org	ans				
		,			Exercise	e 33: Anato	omical se	ction an	d demonstrat	ion		<u></u>	
	XXXI	v.			UNIT 34			NATON			AND I HI	GH	
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					Exercise	35. Anato	omical se	ction an	d demonstrat	ion			
	XXXV	<i>'</i> 1			Exercise	- 36 Anat	omical se	ection a	nd demonstra	tion [.] he	ad and r	leck	
	XXXV				Exercise	e 37: Anat	omical se	ection a	nd demonstra	tion: un	per and	lower lir	nhs
	XXXV	/III.			Exercise	e 38: Anat	omical se	ection a	nd demonstra	tion: tru	unk		
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	Edition. Authors:						
	Richard Drake & A.						
	Wayne Vogl &						
	Adam W. M.						
	Mitchell						
	Sobotta Atlas of	х		х			atlas
	Anatomy, 16th ed.,						
	English/Latin, 16th						
	Edition. Authors:						
	Friedrich Paulsen &						
	Jens Waschke						
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	anatomy, ICON						
	Learning Systems.						
	3rd Bk&Cdr						
	edition. Teterboro,						
	NJ; 2003 and						
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Additional cou	irse information			<u> </u>			 1
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The anatomy course contains 215 hours and is taken over 12 weeks. This includes the time for preparing partial exams, and the first exam term.

The anatomy exam consists of three parts: written, practical and oral.

Two partial written exams will be held during classes.

The first partial exam consists of 50 test-questions and the second partial exam consists of 100 multiple-choice testquestions. Each correct question brings one point.

Also, during the class, there will be a **continuous knowledge check**, students will take quizzes every day. Quizzes are not graded (only pass / fail is recorded), and depending on the success, the student can get up to three additional points on each partial exam, which are added together with the correct answers.

Based on the total number of points (correct answers from the partial exam + additional points), partial exams are graded as follows:

The written exam is graded as follows:

less than 60% correct answers = insufficient (1)

from 60% to 70% = sufficient (2)

from 71% to 80% = good (3)

from 81% to 90% = very good (4)

from 91% to 100% = excellent (5)

Once passed, the partial exam is valid for the entire academic year and that part of the material will not have to be taken again in writing.

After passing the written part, a practical exam follows.

At the practical exam, 25 anatomical structures on the preparations will be marked. All types of preparations can be considered - human plasticized, plastic models as well as donor bodies. To pass the practical part, the student must correctly name and write at least 18 marked structures.

Less than 18 points = insufficient 1

18-19 points = sufficient 2

20-21 points = good 3

22-23 points = very good 4

24-25 points = excellent 5

Once passed, the practical exam is valid for the entire academic year.

After passing the practical exam, the oral part follows.

At the oral exam, the student draws 7 cards with questions that are divided into the same number of categories. The student should orally demonstrate basic knowledge from all parts of the material he has extracted in order for his answer to be considered satisfactory.

The final grade is calculated based on the weight. The written exam carries 50% of the grade, the practical exam carries 20% of the grade, and the oral exam carries 30% of the grade.

During the exam deadlines, students who have not passed some of the partial exams must first pass the written part of the exam that did not pass on the partial exams. After passing the complete written exam, the student takes the practical exam, and after passing the practical exam, he takes the oral part of the exam.

MEDICAL STUDIES IN ENGLISH										
INTEGRATED	Туре	UNIVERSITY								
-	Module	-								
2	Semester									
MEDICAL	Course	MFMSE301								
CHEMISTRY AND	code									
	Chature									
8 Tarahirahawa	Status	OBLIGATORY								
reaching nours		Lectures 42	Exercises	Seminars 34	Practice					
 To achieve studer reflected in the nor organism. To achieve studer To achieve studer biomolecules: prot 	nts' understand rmal function o nts' understand nts' understand eins, carbohyd	ling of the functioning o of the organs as well as i ling of the role of natura ling of the dynamics of s rates, lipids and nucleic	f the organism at n the pathologica al biomolecules in synthesis and deg acids.	the molecular l biochemical p the body. radation of nat	level, which is rocesses in the ural					
- To achieve studer systems.	its' understand	ling of the influence of h	normones on the	function of the	main organ					
Learning outcome Student:	(LO)			Course learning outcome code	LO code at the study program level					
Describes and pres	ents the role o	f biomolecules in the hu	ıman body.	IU- MFMSE301-1	IU-MSE2					
Describes and expl natural macromol- acids.	ains the mecha ecules: protein	anisms of synthesis and ns, carbohydrates, lipi	l degradation of ds and nucleic	IU- MFMSE301-2	IU-MSE3					
Explains the principusing biochemical a	oles of regulation and metabolic	ion and control of cellu arguments to explain p	lar metabolism, hysiological and	IU- MFMSE301-3	IU-MSE3					
Draws the structure	e of biomolecu	les.		IU- MFMSE301-4	IU-MSE1					
Calculates the num	ber of moles o	of ATP that are generate	ed/consumed in	IU-	IU-MSE3					
the metabolism of	natural macror	molecules.		MFMSE301-5						
Calculates the char	ge of a polyper	otide at a given pH.		IU- MFMSE301-6	IU-IMISE1					
I										
In accordance with	the Rulebook o	on the Integrated Studie	s at the School of	Medicine Unive	ersity of Mostar.					
Week / shift	Торі	ic								
Lectures:	(L1) (L2) (L3) (L4) (L5) (L6) (L7) (L8) (L9) (L10 (L11 (L12 Gen (L13 (L14	Topic(L1) The Conformation and Dynamics of Protein Structure(L2) Proteins with Special Functions: Hemoglobin, Myoglobin(L3) Proteins with Special Functions: Collagen, Elastin(L4) Proteins with Special Functions: Actin, Myosin(L5) Plasma Proteins and Immunoglobulins(L6) Vitamins: role and function(L7) Coenzyme; Bioenergetics: The role of ATP(L8) Enzyme catalysis(L9) Metabolism of Nucleotides(L10) Nucleic Acid Structure & Function(L11) DNA Organization, Replication & Repair(L12) RNA Synthesis, Processing & Modification; Protein Synthesis & tGenetic Code(L13) Regulation of Gene Expression(L14) Molecular Genetics, Recombinant DNA & Genomic Technology(L15) Metabolism of Xenobiotics, Pharmacogenetics								
	MEDICAL STUDIES INTEGRATED - 2 MEDICAL CHEMISTRY AND BIOCHEMISTRY II 8 Teaching hours - To achieve studer reflected in the nor organism. - To achieve studer biomolecules: prot - To achieve studer systems. Learning outcome of Student: Describes and pres Describes and pres Describes and expl natural macromol acids. Explains the princip using biochemical a pathophysiological Draws the structure Calculates the num the metabolism of Calculates the char	MEDICAL STUDIES IN ENGLISH INTEGRATED Type - Module 2 Semester MEDICAL Course CHEMISTRY AND BIOCHEMISTRY II 8 Status Teaching hours - - To achieve students' understance reflected in the normal function of organism. - - To achieve students' understance systems. - Learning outcome (LO) - Student: - Describes and presents the role o - Describes and processes. - Draws the structure of biomolecule - Calculates the number of moles of the metabolic pathophysiological processes. - Draws the structure of biomolecule - Calculates the charge of a polype - In accordance with the Rulebook of the metabolism of natural macron - (13) - - <td>MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND BIOCHEMISTRY II MFMSE301 8 Status OBLIGATORY Teaching hours Lectures 42 - To achieve students' understanding of the functioning or reflected in the normal function of the organs as well as i organism. - To achieve students' understanding of the orle of natura- - To achieve students' understanding of the orle of natura- - To achieve students' understanding of the influence of the systems. Learning outcome (LO) Student: Describes and presents the role of biomolecules in the hu Describes and presents the role of biomolecules in the hu Describes and explains the mechanisms of synthesis and natural macromolecules: proteins, carbohydrates, lipi acids. Explains the principles of regulation and control of cellu using biochemical and metabolic arguments to explain p pathophysiological processes. Draws the structure of biomolecules. Calculates the number of moles of ATP that are generated the metabolism of natural macromolecules. Calculates the charge of a polypeptide at a given pH. (L3) Proteins with Special Fu (L4) Proteins with Special Fu (L4) Proteins with Special Fu (L4) Proteins and Im (L6) Vi</td> <td>MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND code BIOCHEMISTRY II 8 Status OBLIGATORY Teaching hours Lectures Exercises 42 34 - To achieve students' understanding of the role of natural biomolecules in reflected in the normal function of the organs as well as in the pathologica organism. - To achieve students' understanding of the role of natural biomolecules in - To achieve students' understanding of the influence of hormones on the systems. Learning outcome (LO) Student: Describes and presents the role of biomolecules in the human body. Describes and explains the mechanisms of synthesis and degradation of natural macromolecules: proteins, carbohydrates, lipids and nucleic acids. Explains the principles of regulation and control of cellular metabolism, using biochemical and metabolic arguments to explain physiological and pathophysiological processes. Draws the structure of biomolecules. Calculates the number of moles of ATP that are generated/consumed in the metabolism of natural macromolecules. Calculates the charge of a polypeptide at a given pH. In accordance with the Rulebook on the Int</td> <td>MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND code Exercises Seminars BIOCHEMISTRY II Lectures Exercises Seminars - 70 achieve students' understanding of the functioning of the organism at the molecular reflected in the normal function of the organs as well as in the pathological biochemical p organism. - - - 70 achieve students' understanding of the dynamics of synthesis and degradation of nat biomolecules: proteins, carbohydrates, lipids and nucleic acids. - - Course Learning outcome (LO) Student: Course learning outcome Course learning outcome Course learning outcome code Course learning outcome Course learning outcome U- MFMSE301-1 MFMSE301-2 acids. Explains the principles of regulation and control of cellular metabolism, using biochemical and metabolic arguments to explain physiological and pathophysiological processes. U- MFMSE301-3 Draws the structure of biomolecules. U- MFMSE301-5 Calculates the number of moles of ATP that are generated</td>	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND BIOCHEMISTRY II MFMSE301 8 Status OBLIGATORY Teaching hours Lectures 42 - To achieve students' understanding of the functioning or reflected in the normal function of the organs as well as i organism. - To achieve students' understanding of the orle of natura- - To achieve students' understanding of the orle of natura- - To achieve students' understanding of the influence of the systems. Learning outcome (LO) Student: Describes and presents the role of biomolecules in the hu Describes and presents the role of biomolecules in the hu Describes and explains the mechanisms of synthesis and natural macromolecules: proteins, carbohydrates, lipi acids. Explains the principles of regulation and control of cellu using biochemical and metabolic arguments to explain p pathophysiological processes. Draws the structure of biomolecules. Calculates the number of moles of ATP that are generated the metabolism of natural macromolecules. Calculates the charge of a polypeptide at a given pH. (L3) Proteins with Special Fu (L4) Proteins with Special Fu (L4) Proteins with Special Fu (L4) Proteins and Im (L6) Vi	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND code BIOCHEMISTRY II 8 Status OBLIGATORY Teaching hours Lectures Exercises 42 34 - To achieve students' understanding of the role of natural biomolecules in reflected in the normal function of the organs as well as in the pathologica organism. - To achieve students' understanding of the role of natural biomolecules in - To achieve students' understanding of the influence of hormones on the systems. Learning outcome (LO) Student: Describes and presents the role of biomolecules in the human body. Describes and explains the mechanisms of synthesis and degradation of natural macromolecules: proteins, carbohydrates, lipids and nucleic acids. Explains the principles of regulation and control of cellular metabolism, using biochemical and metabolic arguments to explain physiological and pathophysiological processes. Draws the structure of biomolecules. Calculates the number of moles of ATP that are generated/consumed in the metabolism of natural macromolecules. Calculates the charge of a polypeptide at a given pH. In accordance with the Rulebook on the Int	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 2 Semester III MEDICAL Course MFMSE301 CHEMISTRY AND code Exercises Seminars BIOCHEMISTRY II Lectures Exercises Seminars - 70 achieve students' understanding of the functioning of the organism at the molecular reflected in the normal function of the organs as well as in the pathological biochemical p organism. - - - 70 achieve students' understanding of the dynamics of synthesis and degradation of nat biomolecules: proteins, carbohydrates, lipids and nucleic acids. - - Course Learning outcome (LO) Student: Course learning outcome Course learning outcome Course learning outcome code Course learning outcome Course learning outcome U- MFMSE301-1 MFMSE301-2 acids. Explains the principles of regulation and control of cellular metabolism, using biochemical and metabolic arguments to explain physiological and pathophysiological processes. U- MFMSE301-3 Draws the structure of biomolecules. U- MFMSE301-5 Calculates the number of moles of ATP that are generated					

					(L17)	Glycogen: Synt	nesis and degi	radation					
					(L18)	Gluconeogenes	is, Cori cycle						
					(L19)	The Pentose Ph	osphate Path	way, Fructos	e, Galacto	se			
					(L20)	Oxidative deca	boxylation, C	itric acid cyc	e				
					(L21)	The Respiratory	/ Chain & Oxic	lative phosp	horylation				
					(L22)	Lipids of Physic	ologic Signific	ance; Choles	terol Synt	hesis, Transport &			
					Excre	etion							
					(L23)	L23) Lipid Transport & Storage							
					(L24)	Oxidation of Fa	tty Acids: Keto	ogenesis					
					(L25)	The Diversity of	the Endocrin	e System					
					(L26)	Urea Cycle, Me	tabolism of Ai	mino Acids					
					(L27)	Free Radicals &	Antioxidant N	Nutrients					
					(L28)	Overview of Me	etabolism & tł	ne Provision	of Metabo	lic Fuels			
		Semi	inars:		At th	ie seminars, stu	dents will solv	ve some task	s about sp	pecific topics. They			
					will r	nake presentatio	ons about sem	ninar topic gi	ven by tea	cher.			
		Exer	cises:		(E1)	Qualitative dete	ction of prote	in					
					(E2)	Serum protein e	lectrophoresis	5					
					(E3)	lonization prope	rties of amino	o acids					
					(E4)	Enzyme kinetics							
					(E5)	Monosaccharide	s and polysac	charides det	erminatior	า			
					(E6)	Lipids							
					(E7)	Acid-base and m	ineral status i	n organism					
					(E8)	Qualitative urine	e analysis						
					(E9)	E9) Creatinine Clearance							
					(E10	10) Human DNA isolation							
Language		Engli	ish										
E-learning		Class	ses are ta	ken in J	person. If nec	essary, lectures,	seminars and	part of the e	exercises c	an take place			
		com	bined (liv	e and o	nline) or com	pletely online vi	a e-learning p	latforms (Go	ogle Meet) up to max 20%.			
Teaching		Teac	hing, inte	eractive	and active-e	kperiential.							
methods													
					Types of	s of assessment (indicate - Bold)							
	1	- 1	Type of p	ore-exa	mination oblig	gation	-		Type of	exam			
midterm	sem	inar	essay/re	eport	practical/	project task	other	written	ora	I practical			
	pap	ber						exam	exa	m			
				A	llocation of E	CTS credits and s	share in the gr	ade	5.070				
Stude	ent ob	ligatio	ons	L	earning	Hours of w	orkload	Share in	ECIS	Share in grade			
.	1.			outo	come code				•	0.01			
Atte	ending	classe	es			110)	3,7	,	0%			
	Semi	nar				10		0,3	5	0%			
Midter	m/Coll	loauiu	m of	IU-M	FMSE301-1	15		0,5		0%			
						15		0,5					
	exerci	ses	ises IU-MFMSE301-6					,					
Pre-exa	exerci m/Wr	ses itten e	exam	IU-M	FMSE301-6 FMSE301-2	55		1,8	3	50%			
Pre-exa	<u>exerci</u> m/Wr	ses itten e	exam	IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5	55		1,8	3	50%			
Pre-exa	exerci m/Wr	itten e	exam	IU-M IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1	55		1,8	3	50%			
Pre-exa	exerci m/Wr Oral ex	ses itten e	exam	IU-N IU-N IU-N IU-N IU-N	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2	55		1,8	3	50%			
Pre-exa	exerci m/Wr Oral ex	itten e	exam	IU-M IU-W IU-W IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3	55		1,8	3	50%			
Pre-exa	exerci m/Wr Oral ex	ses itten e xam	exam n total	IU-M IU-M IU-M IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3	55)	1,8	3	50% 50% 100%			
Pre-exa	exerci m/Wr Dral ex	ses itten e xam	exam n total	IU-M IU-W IU-W IU-M IU-W IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3 Method	55 50 24(of calculating the) e final grade	1,5	3	50% 50% 100%			
Pre-exa	exerci m/Wr Oral ex rade is	ses itten e xam	exam n total ined as ar	IU-M IU-M IU-M IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3 Method onetic mean of	55 50 24(of calculating the grades from the) e final grade e written exar	1,8 1,7 8 n and oral ex	3 7 ram. A det.	50% 50% 100% ailed description is			
Pre-exa The final g	exerci m/Wr Oral ex rade is n addi	ses itten e xam I s obtai	exam n total ined as ar informati	IU-M IU-M IU-M IU-M IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3 Method netic mean of ut the case.	55 50 24(of calculating the grades from the) e final grade e written exar	1,8 1,7 8 n and oral ex	3 7 Ram. A det	50% 50% 100% ailed description is			
Pre-exa The final g provided in Literature	exerci m/Wr Dral ex rade is n addir	ses itten e kam li s obtai	n total ined as ar informati Title	IU-M IU-M IU-M IU-M IU-M IU-M IU-M	FMSE301-6 FMSE301-2 FMSE301-4 FMSE301-5 FMSE301-1 FMSE301-2 FMSE301-3 Method netic mean of ut the case. Edition	55 50 240 of calculating the grades from the) e final grade e written exar Language	1,8 1,7 8 n and oral ex	3 , kam. A det.	50% 50% 100% ailed description is			

	Literature	litle	Edi	tion		Type of literature						
	(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
	Compulsory	Harper's Illustrated		x		х			х			
		Edition; V. Rodwell, D.										
ļ		Bender, K. Botham, P.										

	Kennelly, PA. Weil; 2018.							
	Biochemistry,9th Edition, Berg JM,		x	х		х		
	Tymoczko JL, Gatto Jr. GJ,Stryer L., 2019.							
	Medical chemistry and biochemistry exercises handbook for medical students, I. Mikulić, N. Jelić Knezović, V. Mikulić, K. Landeka,	x		x			x	
Additional	Lehninger principles of biochemistry 8th Edition, DL. Nelson and MM. Cox, 2021.		x	x		x		
	Scientific papers for seminars,different authors		x	х			х	
	teaching materials		x	х				х

Additional course information

As it is a basic course in a specific field of biochemistry, in addition to theoretical classes, by processing selected different seminar topics and solving tasks, the student further expands his knowledge and can demonstrate the ability to think critically and recognize the essential elements of a certain educational issue.

The course in medical chemistry and biochemistry II. contains 110 hours and takes over 5 weeks, which also includes a post-class examination period (pre-exam).

Classes consist of lectures, seminars and exercises.

In order to take the exam, the student is required to fulfill all the other following obligations: attend classes regularly, prepare and present a seminar essay on the given topic, do exercises in the practical part of the class, support them with an appropriate report, and pass the final colloquium.

To pass the pre-exam/written exam (grade sufficient) and to participate in the oral exam, a student has to answer 55% of the questions correctly.

According to the Rulebook on studying at the University of Mostar, grades are assigned as follows:

0-54% insufficient (1); 55-66% sufficient (2);

67-78% good (3);

79-90% (very good 4);

91-100% excellent (5).

The results of the pre-exam/written exam and the results of the oral exam are included in the final grade. The oral exam includes the most important, integrative units of overall biochemistry. The final grade is calculated as the arithmetic mean of the grades obtained on the pre-exam/written exam and oral exam.

Study	MEDICAL STUDIES IN ENGLISH								
Cycle		Туре							
Cycle Study track	INTEGRATED	Nedula							
Study track	-	lviouule Compostor	-						
Year of study	2	Semester	111						
Course title	GENETICS	Course code	MFMSE302						
ECTS	3	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
			20	5	20	0			
Course objectives	 The objectives of the Medical Genetics course are: to introduce medical students with basic facts in medical genetics; introduce students to concepts in human medical genetics and train them to understand genetics' point of view on health and disease; describe and explain the basics of a comprehensive approach to a patient with a genetic disease or disorder, or an increased risk for specific disease. 								
Course learning	Learning outcome Student:	e (LO)	Course learning outcome code	LO code at the study program level					
outcomes	Describes and ex and medical cond	plains types of litions.	IU- MFMSE302-1	IU-MSE1					
	Describes and e according to grou limitations of gen	xplains the ty ups of indicatic etic tests and t	IU- MFMSE302-2	IU-MSE3					
	Distinguishes the effects of genetic variability on the therapeutic IU- MFMSE302-3 IL outcome, and selects the appropriate method of genetic testing according to the indication and the genetic cause of the disease, interprets the basic elements of genetic testing findings								
	Applies basic com	nmunication skills in explaining genetic information. IU- MFMSE302-4 IU-MSE9							
	Searches diagnos	tic and education	ucational databases of genetic diseases. IU- MFMSE302-5 IU-MSE7						
Prerequisites for the course enrolment	In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Mostar								
	Week / shift	Торі	с						
Course content	Lectures	(L1) (L2) (L3) (L4) (L5) (L6) (L7) (L8) (L9) (L10 (S1) (S2) cour (S3) at ris (S4) (S5) (S6) (S7)	Topic(L1) Introduction to Medical genetics(L2) Functional genomics and proteomics(L3) Genomics and the Human Genome Project(L4) Pharmacogenomics(L5) RNA genes and RNAi(L6) Mutations and aberrations(L7) DNA analysis(L8) Mitochondrial inheritance and human development(L9) Gene therapy. Genetically modified organisms (GMO)(L10) Epigenetics(S1) Chromosomes. DNA analysis techniques.(S2) Inheritance patterns (Mendelian and Non-Mendelian) and genercounselling(S3) Applications to public health - screening and identification of populatioat risk(S4) Carcinogenesis and common genetic factors(S5) Genes and molecular mechanisms underlying human disease(S6) Genetic background of congenital anomalies(S7) Gene ethics						
	(E2) Primer design for genetic testing (E3) Bioinformatics (database search and OMIM)								

		(E4) Cloning, transgenic animals, gene therapy											
Language	Er	English											
E-learning	CI	Classes are conducted in person. If necessary, lectures, seminars and part of the practicals can be combined											
	(ir	(in person and online) or completely online via e-learning platforms (Google Meet) up to a maximum 20%.											
Teaching	Te	Teaching, interactive and active-experiential.											
methods													
Types of assessment (indicate - Bold)													
·		Type of pre-examination obligation Type of exam											
midterm	semin	ar ess	ay/	pr	actical/	project tas	k	other	written	1	oral	prac	tical
	pape	r rep	ort	Alless	tion of I	CTC aradit		ro in the	exam	m exam			
Student obligations Learning Hours of workload Share in ECTS Share in grade									rado				
Student	l obliga	lions	outo	ome co	s nde	HOUR		Uau	Slidlel	II ECIS	Share in gro		laue
Class a	attenda	nce	oute				45		1	5			
Comi			IU-M	FMSE30)2-1		15			2,5		1 5 0/	
Semi	nar pap	ber	IU-MF	MSE30	2-4,5		15		0,	0,5		15%	
			IU-M	FMSE30)2-1								
Pre-exam/	writte	n exam		FIVISE30	SE302-2 30		30		1,	1,0		85%	
		In total		11015250	<i>J</i> <u>Z</u> J		90		3	}		100%	
				1	Vethod	of calculat	ing the fi	nal grad	e				
The final gra	ade is c	btained as	a weig	hting c	of the g	rades from	the sem	inar assi	gnment (15%	of the	grade) a	nd the v	vritten
exam (85% o	of the g	rade).	U	. 0	U				0 (0 ,		
According to	o the St	udy Regula	tions, t	he fina	l grade	is obtained	d as follow	vs:					
0 – 54% insu	ufficient	t (1)											
55 – 66% su	fficient	(2)											
67 – 78% go	oa (3)	۱ (۸)											
91 – 100% e	vcellen	1 (4) † (5)											
Literature		Title		Fd	ition		Lan				Type of	e of literature	
(indicate)	(tit	le, author,	year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Em	erv's Fleme	nts of		x		v			x			
compaisory	Me	dical Gene	tics –		^		^			^			
	Pet	er D Turng	enny,										
	Siai	Sian Ellard, 14th											
	edition, Elsevier,												
	201	.2											
Additional	Ess	ential M	edical		х		х			х			
	gen	ietics – ⁻	Fobias										
	E.S,	Connor	IVI,										
	6th	edition	.n IVI, Milev-										
	Bla	ckwell. 201	1										
	2.0	, 202				1	1					1	
Additional course information													

Study	MEDICAL STUDIES IN ENGLISH												
programme													
Cycle	INTEGRATED	Туре	UNIVERSITY										
Study track	-	Module	· .										
Year of study	2	Semester	Ш										
Course title	HISTOLOGY	Course code	MFMSE303										
FCTS		Status											
		Status	Lectures Exercises Seminars Practice										
	reaching nours		50	41	44	0							
Course	The objectives of	this course are	to provide information'	s about morpholo	y of human org	ans and							
objectives	development of l	numan being, to	o synthesize the knowled	dge about the micr	oscopic structur	e and function							
	of human tissues	that build orga	ns and tissues in the hu	man body.									
	Learning outcom	e (LO)			Course	LO code at the							
Course	Student:		learning	study program									
learning	Distinguishes the	hasics of micro	sconic structure of hum	an body through	outcome code	IUI-MSE1							
outcomes	the microscopic a	analysis of hum	an tissue and organs pre	parations.	MFMSE303-1								
	Applies the skills	in microscopi	IU-	IU-MSE2									
	histological struc	tures of tissues	·	MFMSE303-2									
	Distinguishes and	d describes deta	IU-	IU-MSE3									
	Distinguishes the		aturation and analias t	ha muinainlea an	MFMSE303-3								
	which pathology	and nathonbys	I body structure and applies the principles on U-										
	Distinguishes and	and pathophys	knowledge in human embryology (recognizing										
	treating and prev	enting develop	elopmental disorders).										
Prerequisites	In accordance wi	th the Rulebool	on the Integrated Stud	ies at the School of	f Medicine Unive	ersity of Mostar.							
for the course													
enrolment	Maale / abift	Tani	-										
Course		(11)	c Cametogenesis the firs	t and second week	of development	ŀ							
content	Lectures	(L1) (L2)	Embryonic period, foeta	l period and conge	week of development								
		(L3)	(L2) Embryonic period, roetal period and congenital malformations (L3) Epithelial and connective tissue										
		(L4)	(L4) Formation of blood cells										
		(L5)	(L5) Development of the skeletal system										
		(L6)	(L6) Development and structure of muscle tissue										
		(L7)	(L7) Development and structure of the nervous tissue										
		(19)	(L8) Development and structure of the heart and blood vessels (L9) Development and structure of the lymphatic system										
		(L10	(L10) Development and structure of the neuroendocrine system										
		(L11	(L11) Development and structure of the respiratory system, skin system										
		(L12	(L12) Development of head and neck										
		(L13	(L13) Development of oral cavity										
		(L14	(L14) Development of body cavities and structure of alimentary canal										
		(L15	(L15) Development and structure of the glands of the gastrointestinal tract										
		(L10	(L17) Development and structure of the urinary tract										
		, (L18	(L18) Development and structure of the female reproductive system										
		(L19) Development and strue	cture of the male r	eproductive syst	tem							
		(L20) Development and strue	cture of the ear									
	Constr	(L21) Development and stru	cture of the eye									
	Seminars	(\$1)	ivienstrual, ovarian cycle	e and tertilization									
		(52)	Covering and glandular	r enithelium celle	and intercellula	ar substance of							
		conr	connective tissue										
		(S4)	(S4) Blood cells and anomalies										
					(S5) S	(S5) Supportive tissue-cartilage, adipose tissue and bone ossification.							
------------	------------	-----------	-------------	-----------	--------------------------	---	-------------------------	-------------------	----------	----------	------------	--	--
					(S6) I	Morphological b	ased contractilit	Σ γ					
					(S7) ⁻	The histological s	structure of the	nervous tissue					
					(S8) 5	Structure of the	heart and blood	vessels, placer	nta				
					(S9) ⁻	The lymphatic or	rgans, regional l	ymph nodes an	d lymp	h vessel	S		
					(S10)	The organizatio	on of the endocr	ine glands					
					(S11)	Respiratory me	mbranes and sk	in					
					(S12)	Development a	nd anomalies of	the organs of t	the hea	d and n	eck		
					(S13)	Structure of the	e mouth						
					(S14)	General structu	ire of the alimer	ntary canal - oes	sophag	us and s	stomach		
					(S15)	Structure of the	e digestive syste	m - small and la	arge int	estine,	appendix		
					(S16)	Glands of the g	astrointestinal t	ract					
					(S17)	Structure of the	e urinary tract						
					(S18)	Structure of the	e female reprod	uctive system					
					(\$19)	Structure of the	e male reproduc	tive system					
					(\$20)	Structure of the	eear						
					(\$21)	Structure of the	e eye						
		Exercise	es		(E1)	(E1) Preparing preparations for histology (F2) The placenta and umbilical cord							
					(E2)	(E2) The placenta and umbilical cord							
					(E3)	Lining epitheliun	n, unformed cor	inective tissue,	tendor	15			
					(E4):	Smear of bone m	narrow and bloc	o smear	l-:f:-				
					(E5)	nyaime, elastic	and connective	e Cartilage, de	calcille	ated bo	ne, a bone		
					(EC)	The skeletal sm	and uestilat us						
					(E0)	Spinal cord coro		m poriphoral r		anglia			
				([7])	Hoart valvos art	orios and voins	ini, peripherari	ieive g	angna				
				(E0)	Thymus lymph r	eries and veills	nd nalatine tong	il					
				(E3)	The nituitary ol	and thyroid gla	nd adrenal gla	nd enit	helial c	ornuscle			
				(E10)	The lungs and t	rachea skin ma	ammary gland	iu, cpi		Sipuscie			
				(E12)	Lip. tip of the to	ongue, salivary a	and papilla valla	ita					
					(E13)	Palate, teeth ar	nd tooth develo	oment					
					(E14)	The oesophagu	s and stomach						
					(E15)	(E14) The oesophagus and stomach (E15) Small and large intestine, appendix							
					(E16	(E16) Liver and pancreas							
					(E17)	(E16) Liver and pancreas (E17) Kidney, bladder and urethra							
					(E18)	Ovary, fallopiar	n tube, uterus, v	agina					
					(E19)	Testis, vas defe	rens, prostate, s	seminal vesicle	and pe	nis			
					(E20)	Ear			·				
					(E21)) Eye							
Language		English											
E-learning		Up to 10)% .										
Teaching		Teachin	g, int	teractive	e and active-	experiential.							
methods													
					Types	of assessment (ii	ndicate - Bold)						
	n	Ту	pe of	f pre-ex	amination ob	oligation		-	Type of	exam			
midterm	se	minar	e	ssay/	practical	/project task	other	written	ora	al	practical		
	F	aper	re	eport				exam	exa	m			
					Allocation of	f ECTS credits an	d share in the g	rade					
Studer	nt obl	igations		Le	arning	Hours of v	workload	Share in EC	ĊTS	Shar	e in grade		
				outco	ome code								
Atten	ding	classes				13	5	4.5			0%		
Sem	inar	essay		IU- M	FMSE303-1	135 4.5 0% 5E303-1 15 0.5 0%							
				IU-IM	FIVISE303-2 FMSE302-2	5E303-1 15 0.5 0% 5E303-2 5E303-3 5E303-3 5E303-3							
				IU- M	FMSF303-4								
				IU- M	FMSE303-5	ISE303-5							
Pre-exam	n/Wri	tten exar	n	IU- M	FMSE303-1	ISE303-1 90 3 50%					50%		
				IU- M	FMSE303-2	-		-					
	IU- IU-			IU- M	FMSF303-3								

		IU- M	IFMSE30	03-4										
		IU- M	IFMSE30	03-5										
Oral exa	am	IU- M	FMSE3	03-1		30		:	1		30%			
		IU- M	FMSE3	03-2										
		IU- M	FMSE3	03-3										
		IU- M	FMSE3	03-4										
		IU- M	FMSE3	03-5										
Dractica	lavam			02.1		20			1		20%			
Practica	lexam			03-1		30			1			20%		
				03-2										
				03-3										
				03-4 02 F										
		IU- IVI	FIVISES	03-5										
	In total				300 10							, D		
				Method	of calculat	ting the fi	nal grad	e		•				
The final score is	the sum of =	compl	ete wri	itten (50)%) + pract	ical (20%) + oral (30%) exam.						
A detailed descri	iption is giver	in the	additic	onal info	ormation al	bout the s	subject.							
Literature	Title		Edi	ition		Lan	guage			Type of I	iteratur	e		
(indicate)	(title, author,	year)	own	other	croatian	english	other	multilingual	book	article	script	other		
Compulsory 1	unqueira's Ba	asic												
l l l l l l l l l l l l l l l l l l l	Histology: Tex	t and		х		х						x		
A	Atlas, 12th Fd	ition		~		~						~		
	angman's Me	edical												
F	mbryology	curcur		x		x			x					
1	12th edition h	NV		^		~			^					
	Sadler T W (2011)												
Additional V	/MS image		х					X				x		
	collection:													
	Histology Atla	s.												
2	2008.													
Additional cours	e informatior	า	I									•		
Students are obl	iged to regula	arlv atte	end and	d active	ly participa	ite in all f	orms of	classes.						
During the cours	e there will b	e two r	partial t	tests (H	1 and H2).	The first i	partial te	est (H1) includ	es Gene	eral Embi	vology	and		
development of	the skeletal	muscul	ar circ	ulatory	respirator	v nervou	s system	and skin (Sp	ecial em	bryology) Histol	logical		
threads in the fir	rst partial test	t consis	ts of er	oithelial	. connectiv	ve. fat. cai	rtilage, b	one. nerve ar	nd musc	le tissue	and vas	cular		
system, blood ce	ells and forma	tion of	blood	cells. in	, eenne. res	piratory.	neuroen	docrine syste	m and s	kin. The	first par	tial		
test consists of 6	60 auestions (30 aue	stions	from En	nbrvology a	and 30 au	estions	rom Histolog	v).					
The second parti	ial test (H2) ir	ncludes	the de	velopm	ent of bod	v cavities	. digestiv	e and uroger	,, iital svst	em. the	develop	ment		
of head and necl	k, ear and eve	e (Speci	al emb	rvology). Histologi	cal thread	ds in the	second partia	al test co	onsists of	f the dig	estive		
system, liver, par	, ncreas, urinai	rv svste	em, mal	le and fe	, emale repr	oductive	system a	and sensory o	rgans. T	he secor	id partia	al test		
consists of 50 gu	estions (20 a	, , uestior	ns from	Embryo	ology and 3	30 questic	, ons from	, Histology).	0		•			
The total percen	tage of corre	ct answ	ers ne	, eded fo	r a positive	assessm	ent, 60%	of the writte	n tests.	For a po	sitive			
evaluation is also	o necessary to	o achiev	ve 50%	correct	answers f	rom the f	irst and	second group	of ques	tions fro	m Embr	vology		
and from the firs	, st and second	group	of que	stions fr	om Histolo	ogy.		0 1	•			, 0,		
For students who	o didn't pass	partial	tests, v	vritten e	exam make	es a single	unit of	110 questions	and ca	nnot be 1	aken			
separately.		•	,		-	0 -			-					
Positive mark of	preliminary t	ests is i	recogni	ized dur	ing the cu	rent acad	demic ve	ar.						
All students who	weren't abse	ent fror	n scho	ol have	the right to	take par	tial tests	. Also, those	who pas	s additic	nal exa	m		
from loctures du								· · · ·		-		- ++		
from lectures du	All students who weren't absent from school have the right to take partial tests. Also, those who pass additional exam from lectures during which they were not in class or on which they didn't show sufficient knowledge can approach to test.													

H1-first partial test

36-41=(2); 42-48=(3); 49-54=(4); 55-60=(5);

H2-second partial test 30-35=(2); 36-40=(3); 41-45=(4);46-50=(5); Final written exam 66-76=(2); 77-88=(3); 89-99=(4); 100-110=(5);Practical and oral exam are available to students who have passed the first and second part of the test in Histology and Embryology. Practical exam (20% of the final grade) The practical exam consists of 7 histological samples. Students must at least identify 5 out of 7 samples under the microscope, and then must identify microscopic details on them. The recognition of the samples is scored (maximum 7 points), showing the required structure on the samples (maximum 7 points), and finding the required structure to the samples (maximum 7 points). 13-14 = (2);15-17 = (3);18-19 = (4);20-21 = (5); Oral examination (30% of the final grade) The oral exam consists of 4 questions (1 general embryology, 1 special embryology, 1 general histology, 1 special histology). Students draw cards with certain issues.

Study	MEDICAL STUDIES IN ENGLISH								
programme		Tuno							
Cycle	INTEGRATED	Type	UNIVERSITY						
Study track	-	Corrector	-						
Year of study		Semester							
Course title	BASIC NEUROSCIENCE	code	MFMSE304						
ECTS	8	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
			20	24	56	0			
Course objectives	Course objectives are: - to provide the so applying the acc histology and ph - to provide the so internal structur	tudent with quired knowl nysiology tudent with re of the brai	knowledge about the edge of physics, chem knowledge about mor in, cellular and molect	normal function on histry, biochemistic rphology of the brular neuroscience	of our nervous s ry, biology, ana ain in general - , synaptic trans	system by tomy, external and mission,			
	sensory and mo	tor systems,	general and control f	unction of the bra	in, higher brair	functions.			
Course learning outcomes	Learning outcome (LO) Student:				Course learning outcome code	LO code at the study program level			
	 names, recogniz the central ner nervous system 	zes and deso rvous syster as well as sp	cribes the morpholog m, midbrain, end br pinal cord and explains	ical features of ain, peripheral s their function.	IU- MFMSE304-1	IU-MSE1 IU-MSE2			
	 describes the neurons, explain potential, action 	fundamenta ins the gen potentials a	al electrophysiologica neration of resting t and postsynaptic pote	al features of transmembrane ntials.	IU- MFMSE304-2	IU-MSE1 IU-MSE2 IU-M3			
	 describes and between neuror mechanism of structure of rea transmission. 	explains th ns, classifies action of ceptors and	e way information and explains the basic neurotransmitters, discusses their role	is transmitted properties and describes the in information	IU- MFMSE304-3	IU-MSE1 IU-MSE2 IU-MSE3			
	 describes, expla systems and ap practice. 	ains and ou plies knowle	utlines the organizat dge in solving examp	ion of sensory les from clinical	IU- MFMSE304-4	IU-MSE1 IU-MSE2 IU-MSE3 IU-MSE4 IU-MSE5 IU-MSE6			
	 describes, explained systems and appropriate practice. 	ains and sk plies knowle	xetches the organiza dge in solving examp	ition of motor les from clinical	IU- MFMSE304-5	IU-MSE1 IU-MSE2 IU-MSE3 IU-MSE5 IU-MSE6			
	- describes and i features of hi emotions, sexu control of breat	nterprets th gher brain ality, wakef hing and hea	ne structure and neu functions: learning fulness and sleep, a artbeat.	IU- MFMSE304-6	IU-MSE1 IU-MSE2 IU-MSE3				
	 applies knowled skills in solving e 	dge from th electrophysic	eoretical classes and blogical problems on t	d demonstrates he computer.	IU- MFMSE304-7	IU-MSE1 IU-MSE21			
	 applies knowled skills of recordin human body. 	ge from theo g bioelectric	oretical classes and de (EEG, EMG, EOG) pot	emonstrates the entials from the	IU- MFMSE304-8	IU-MSE1 IU-MSE21			

Prerequisites	In accordance with the Rulebo	ok on the Integrated Studies at the School of Medicine University of Mostar.
for the course		
enrolment		
	Week / shift	Торіс
Course content	Lectures	(L1) Introductory lecture
		(L2) Neuron is a basic structural-functional unit of the CNS
		(L3) CNS research methods. Development of the CNS and processes of
		development reorganization and plasticity
		(L4) Biophysical basics of excitability
		(L5) Neurotransmitters in health and disease
		(L6) Serotonin
		(L7) General organization of the sensory systems. Taste and smell
		(L8) Physiology of the eye and phototransduction
		(L9) General structure of the motor systems
		(L10) Motor cortex and voluntary movements
		(L11) Brain lateralization
		(L12) Control of breathing during wakefulness and during sleep. Sleep
		(112) Conoral brain function
	Sominars	(LLS) General Drain function (C1) The structure of gray and white matter of the spinal cord
	Seminars	(S1) The structure of gray and white matter of the brainstem and
		(S2) The structure of gray and white matter of the diencenhalon
		(S4) Telencephalon
		(S5) Neuroanatomy, summary
		(S6) Cell membrane, ion channels, passive and active neuron properties
		(S7) Structure and function of the synapse and the cellular basis of
		behavior (neuron sequences, pathways, circles, networks, systems)
		(S8) Neurotransmitters, neuropeptides and their receptor
		(S9) Electrophysiology of neurons, summary
		(S10) Pain, heat and cold – anterolateral sensory system
		Touch, pressure, and kinesthesia - the dorsal column system
		(S11) Ear - organ of hearing and balance.
		Auditory and vestibular system
		(S12) Organization of the retina, primary visual pathway and primary
		(S13) Eve movement and the organization of associative visual fields
		(S14) Sensory system, summary
		(S15) Spinal motor mechanisms and reflexes. Role of the descending
		pathways from the brainstem in maintaining posture and muscle tone;
		spinal shock šok
		(S16) Motor functions of the cerebellum and the basal ganglia
		(S17) Motor system, summary
		(S18) Organization and structure functions of the limbic system
		(S19) Neurobiology of emotion and sexuality
		(S20) Anatomy and psychology of learning and memory
		(S21) Hypothalamus; autonomic and endocrine control
		(S22) Cillical Selfilliar (S22) Conoral brain functions: EEG
		(S24) Stages of wakefulness and alertness: sleen
		(S25) Neurobiology of attention and associative functions
		of the prefrontal and posterior parietal cortex
		(S26) Cellular mechanisms of learning and memory
	Exercises	(E1) Appearance and distribution of gray and white matter of the spinal
		cord
		(E2) Appearance and distribution of gray and white matter of the
		brainstem
		(E3) Clinical-anatomic syndromes of the spinal cord
		(E4) Resting potential
		(E5) Action potential

Language E-learning	E (English Classes are co combined (in	(E0) Synaplic potential (E7) Signalization (E8) Reflexes and reaction time (E9) Physiology of sensation (E10) Muscle and electromyography (E11) EEG and evoked potential (E12) SleepLab Polysomnography nglish lasses are conducted in person. If necessary, lectures, seminars and part of the exercises can be pombined (in person and online) via e-learning platforms (Google Meet) – up to 20% of classes can be erformed online. eaching, interactive and active-experiential.													
Teaching methods	r	Feaching, inte	ractive a	nd activ	ve-expei	riential.										
			Types of assessment (indicate - Bold)													
		Type of pre-examination obligation Type of exam														
midterm	semina paper	ar essay/re r	eport	pra	ctical/pi	roject task		other	written exam	en oral practical n exam						
	10 0 10 0	· I	Allo	cation	of ECTS	credits and	d share in	the gra	de			I				
Studer	nt oblig	gations	Learn	ing out	come	Hours	of work	load	Share ir	n ECTS	Sh	are in g	rade			
Atter	nding c	lasses		couc			100		3.	3		0%				
Activity of	during	seminars	IU-N	MFMSE3	04-		40		1.	3		0%				
Pre-exan	n/Writ	ten exam	IU-N	, <u>3,4,5,6,</u> MFMSE3	04- 7 8		100		3.4	4		100%	,			
		In total	1,2	,3,4,3,0,	7,0		240		8			100%				
		in cotai		Meth	od of ca	Iculating t	he final g	grade				100/0	,			
According to as following: 0-54% insuff 55-66% suffi 67-78% good 79- 90% (ver 91-100% exc	icient (cient (d (3); y good cellent	ulebook on the (1); 2); I 4); (5).	e Integra	ated Stu	idies at 1	the School	of Medic	cine Uni	versity of Mo	ostar, g	rades al	re assigi	ned			
Literature		Title		Ed	ition		Lan	guage		Т	ype of l	iteratur	e			
(indicate)	(1	title, author, y	ear)	own	other	croatian	english	other	multilingual	book	article	script	other			
Compulsory	Sieg ESSE NEU Editi Lipp Wilk	el, A. and Sapi INTIAL ROSCIENCE, 4 ion, Wolters K incott William	ru, H.: th luwer/ s &		x		×			x						
	John Davi Elect Neur Vers <i>Neur</i> Sher	n Huguenard a d A. McCormi trophysiology ron, Windows ion, A Compa <i>robiology</i> by G pard	nd ck: of the nion to Gordon		x		X			x						
Additional	Purv Neu publ Asso	ves et al roscience 5 th e lished by Sinau ociates	edition Jer		x	x				x						
	Kano J.H. PRIN SCIE	del, E.R., Schw and Jessel, T.N ICIPLES OF NE <u>NCE, 4th</u> editi	artz, ⁄l.: URAL on,		x	x				x						

McGraw-Hill; New York, SAD, 2000.						
Guyton, A.C. and Hall: MEDICAL PHYSIOLOGY,	х	x		x		
11th edition. 2006.						

Additional course information

The Basic neuroscience course is performed with a total duration of 100 hours, divided into five teaching units (Neuroanatomy, Basics of neuron electrophysiology, Sensory systems, Motor systems, General brain functions). Topics that are covered through lectures, seminars and practical lessons are announced on the beginning of the course, including an indication of the prescribed literature.

Attendance of all forms of instruction is obligatory (except the attendance of individual consultations), and all students are obligated to study the prescribed material IN ADVANCE for seminars and practical lessons, using the main textbook and/or the additional literature.

Activity at the seminars is rewarded with pluses, whilst not being prepared will be marked as a minus. All absences and minuses have to be compensated through a colloquium at least 2 days before the exam. Students not taking the exam in the pre-exam period have to take a colloquium in a 10 days period after the end of the Basic neuroscience course, in order to compensate their absences and minuses.

Neuroscience is tested in the form of written exam that consists of 100 multiple answer questions with only one answer being correct. Each correct answer carries one point. In order to pass the exam (grade sufficient), the student must answer 55% of the questions correctly.

The final grade is based on the result achieved on the written exam.

Study		MEDICAL STU	JDIES I	IN ENGLISH							
programm	e			_							
Cycle		INTEGRATED		Туре	UNIVERSITY						
Study track	<	-		Module	-						
Year of stu	dy	2		Semester	111						
Course title	e	CROATIAN		Course	MFMSE305						
FCTS		LANGUAGE I	-	CODE Status							
Lets			rc	Status	Lectures		F۷	arcisas	Semin	arc	Practice
		reaching nou	13		0		L7	0	25	ai 3	0
Course objectives		- to a com <i>Refe</i> - to re Learning out	pply g peten erence ecogni come (rammatical st ce at the A1 a <i>for Language</i> ze cultural fea (LO)	ructures in the Cr nd A2 levels (acc s) Itures of the Croa	roatian l ording t atian spe	langua to the (eaking	ge and vocat Common Eur area	oulary for opean Fra Course	acqu imew	iring language vork of LO code at the
Course learning	_	Student:	asics	finhonology	morphology and	syntax o	of the C	i related	learning outcome co	ode	study program level
outcomes		to the conter	nt of th	ne course	inorphology and	syntax u	n the c	I Telateu I	иFMSE305	-1	IU-MSE19
		Demonstrate	s basi	c conversation	nal skills				U-	2	IU-MSE14
	-	Demonstrate	s road	ling and writin	a of simple texts				/IFIVISE305	-2	IU-MSE19
		Demonstrate	Sicau		ig of simple texts			r	ر ۸FMSE305	-3	IU-MSE19
		Applies topic	-relate	ed vocabulary				1	U-		IU-MSE14
	-							٢	/FMSE305	-4	IU-MSE19
		Recognizes c	ultural	features of t	he Croatian speal	king area	а	ו ר	U- //FMSE305 [,]	-5	IU-MSE14 IU-MSE19
Prerequisit for the cou	es Irse	In accordanc	e with	the Rulebook	on the Integrate	d Studie	es at th	e School of N	/Iedicine l	Jnive	rsity of Mostar
emonnent		Week / shift		Тор	ic						
Course		1.		Pres	ent tense of the	modal v	/erbs: /	norati, trebo	ıti.		
content	F	2.		Pres	ent tense of the	modal v	/erbs: s	smjeti, moći,	htjeti.		
		3.		Pres	sent tense (<i>-ovati</i>	/-ivati >	∘ -ujem).			
		4.		Loca	ative case.						
		5.		Past	tense of the ver	b <i>biti</i> .					
	_	6.		Past	tense of the ver	bs endir	ng in <i>-a</i>	iti, -iti, -ovati	, -ivati. Re	eflexi	ve verbs.
	-	7.		Past	tense of the ver	bs endir	ng in <i>-s</i>	ti, -ći.			
	-	8.		Om	tting the persona	al prono	ouns in	the nominat	ive case.		
	-	9.		Futi	ire tense.						
	F	10.		Dat	ve case.						
	F	11.		Gen	itive case						
	F	13.		The	use of a number	in front	ofan	oun.			
	F	14.		The	concept of posse	ession					
	Ē	15.		The	conditional.						
Language		English									
E-learning		In accordanc	e with	study regulat	ions (up to max 2	20%).					
Teaching		- Tea	ching r	nethods							
methous		- inte	active	Types of	f assessment (in	licate - I	Bold)				
		Type of	ore-ex	amination ob	ligation		2010)		Type of	exar	n
midterm	semir	nar essay/re	eport	practical	/project task	oth	ner	written	ora	al	practical
	рар	er						exam	exa	m	
Ctuda	nt chli	gations		Allocation of	Hours of w	share in	i the gi	share in	ECTS		haro in grado
Stude		gations	out	tcome code	ng Hours of workload Share in ECTS Share in gra code						iare in graue

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Attending	for the even		-			25		0,	8		20 %	
	I of the exam	111 1.4		05		-		0	2		90.0/	
Pre-exam	iyinai exam	1, 2	2, 3, 4,	5		Э		0,	Ζ		80 %)
	In total					30		1	-		100%	/ D
			М	ethod c	of calculati	ng the fin	al grade	2				
Attending clas	sses and preparing	g for the	e exam	:								
- irregular arr	ivals = 0% of the	final gra	ade									
- regular arriv	als without activit	ies = 11	.% of t	he final	grade							
- activity only	at the teacher's ir	istigatio	n = 14	1% of th	e final gra	de						
- self-initiated	d = 17% of	the fina	al grado	e	C (1) C							
- self-initiated activity with quality discussion = 20% of the final grade												
Pre exam or final written/oral exam:												
Pre exam or final written/oral exam: less than 55% correct answers = 0% of the final grade												
less than 55% correct answers = 0% of the final grade 55% - 66% correct answers = 44% of the final grade												
55% - 66% correct answers = 44% of the final grade 67% - 78% correct answers =56% of the final grade												
79% - 90% correct answers = 68% of the final grade												
91% - 100% correct answers = 80% of the final grade												
According to	the Study Regulati	ons, th	e final	grade is	obtained	as follow:	s:					
0 – 54% insuf	ficient (1)											
55 – 66% suff	icient (2)											
67 – 78% goo	d (3)											
79 – 90% very	/ good (4)											
91 – 100% ex	cellent (5)											
Literature	Title		Fdi	ition	Ι	Lan	guage			Type of I	iteratur	.e
(indicate)	(title, author, y	ear)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Čilaš Mikulić	, M _		×	v	0		5	v		•	
compulsory	Gulešić Machata	M –		^	^				^			
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	jezika za razine A	1 -A2,										
	Hrvatska sveu	čilišna										
	naklada, Zagreb,	2021.										
	Čilaš Mikulić,	M. –		х	х				х			
	Gulešić Machata	, M. –										
	Udier, S.	L.,										
	Razgovarajte s n	ama!,										
	vjezbenica nrvat	skoga										
	Jezika za razine A	ilična										
	naklada Zagreh	2021										
Additional	Krešić K – Budr	2021. nir 1	x		x				x			
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	udžbenik hrvat											
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				1	1	1	1					
	I A2, PRES	SUIVI,										
	I A2, PRES Mostar, 2021.	SUM,										
Additional co	I A2, PRES Mostar, 2021. urse information	SUM,										
Additional co - The student	I A2, PRES Mostar, 2021. urse information is obliged to regul	larly att	end le	ctures.								

Study programme	MEDICAL STUDIES IN ENGLISH									
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module								
Year of study	2	Semester	IV							
Course title	MEDICAL	Course	MFMSE401							
	PHYSIOLOGY	code								
ECTS	19	Status	OBLIGATORY							
	Teaching hours		Lectures	Exercises	Sei	minars	Practice			
			53	40		87	0			
Course objectives	The objective of th - acquaint student the existing knowle - train students to measures.	e Medical Phy s with the nor edge about th be able to und	vsiology course is: mal functions of the orga e functioning of cells, tiss derstand pathophysiolog	anism that main sues and organs ical mechanisms	tain home ; s and pha	eostasis, a rmacothe	and expand rapeutic			
	Learning outcome	(LO)			Course	learning	LO code at			
Course learning outcomes	Student:				outcom	ne code	the study program level			
	Describes and ex	plains basic f	unctional features of n	euromuscular,	IU-MFMS	SE401-1	IU-MSE1			
	cardiovascular and whole organism.	d renal systen	ns at the level of cell, o	organ and the			IU-MSE2			
	Describes and exp	plains the bas	sic functional features o	of respiratory,	IU-MFMS	SE401-2	IU-MSE2			
	gastrointestinal, e	endocrinologic	al, reproductive and l	hematopoietic						
	Analyzes and asso	ciates the ope	ration of control mechan	i. Jisms including	IU-MFMS	SE401-3	IU-MSE3			
	negative and pos	itive feedbac	k systems to controlled	d factors and						
	physiological proc	cesses in the	e organism that are	necessary for						
	maintenance of ho	meostasis.								
	Describes and and	alyzes the cha	nges that occur in orga	nic systems if	IU-MFMS	5E401-4	IU-MSE4			
	the appearance of	symptoms an	d/or signs of the disease							
	Measures the art	erial pressure	e value and interprets	the obtained	IU-MFMS	SE401-5	IU-MSE3 IU-MSE8			
	Analyzes and interview	erprets the r	results of basic respira	tory function	IU-MFMS	SE401-6	IU-MSE3			
	measurements, str	ress test and g	lucose tolerance.				IU-MSE8			
	Analyzes and inter	prets a norma	l electrocardiographic re	cord.	IU-MFMS	SE401-7	IU-MSE1 IU-MSE21			
				<u> </u>						
Prerequisites for the course enrolment	In accordance with	the Rulebook	on the Integrated Studie	es at the School o	of Medicir	ne Univers	sity of Mostar.			
	Week / shift	Тор	ic							
Course	Lectures	(L1)	Functional organizatio	on of human	body; ti	ransport	through cell			
content		mei	mbranes Decis abusies of more busi							
		(LZ) (L3)	Basic physics of memora	ane potentiais						
		(L3) (L4)	Contraction of skeletal r	muscle						
		(L5)	Excitation and contracti	on of smooth m	uscle					
		(L6)	Physiology of cardiac m	uscle		ci				
		(L7)	Overview of the circulat	tion: physics of provide the second	oressure, 1	flow and i	resistance			
		(LO)	icture of microcirculation		ai teriai ai		s systems, the			
		(L9)	Long-term control of a	arterial pressure	e: integrat	ted syste	m for arterial			
		pre	ssure regulation		-					
		(L10)) Hemorrhagic shock and	d physiological	orinciples	of treatm	ient			
			 Numeys: physiological Micturition and diureti 	anatomy and fu ics	nction					
	1	(-14	-,							

	(L13) Thirst, integration of renal mechanisms for control of blood volume and
	extracellular fluid volume
	(L14) Mechanics of lungs, Laplace's law, functions of the respiratory
	passageways
	(L15) Regulation od respiration
	(L16) Methods for studying respiratory abnormalities
	(L17) Physiological problems of high-altitude and deep-sea diving
	(L18) The autonomic nervous system and the adrenal medulla
	(L19) General principles of gastrointestinal function
	(L20) Propulsion and mixing of food in the alimentary tract
	(L21) Review and regulation of carbohydrate metabolism, formation of ATP
	(L22) Review and regulation of lipid and protein metabolism
	(L23) The liver as an organ
	(L24) Dietary balance, regulation od feeding, obesity and starvation, vitamins
	and minerals
	(L25) Body temperature regulation
	(L26) Introduction to endocrinology; principles of secretion, transport, action
	and clearance of hormones
	(L27) Pituitary gland-hypothalamus relation, posterior pituitary hormones
	(L28) Pregnancy, parturition, lactation
	(129) Frythrocytes and blood types
	(130) Resistance of the body to infection: leucocytes
	(131) Hemostasis and blood coagulation
Seminars	(S1) Membrane and action potentials
Serimars	(S2) Cardiac cycle, regulation of heart numping
	(S3) Rhythmical excitation of the heart
	(S4) ECG
	(S5) Integration (general physiology, potentials, muscles and heart)
	(S6) Capillary fluid exchange, local control of tissue blood flow
	(S7) Humoral and nervous regulation of circulation, rapid control of arterial
	pressure
	(S8) Cardiac output and venous return
	(S9) Muscle blood flow and coronary circulation
	(S10) Integration (circulation)
	(S11) The body fluid compartments and volumes and their balance: edema
	(S12) Glomerular filtration, renal blood flow and their control
	(S13) Tubular reabsorption and secretion
	(S14) Regulation of reabsorption in tubules
	(S15) Regulation of extracellular fluid osmolarity and sodium concentration
	(S16) Regulation of renal potassium calcium and magnesium excretion
	(S17) Acid-base regulation: respiratory and regulation acidosis and
	alkalosis
	(S18) Integration (kidneys and body fluids)
	(S19) Pulmonary ventilation
	(S20) Pulmonary circulation, pulmonary edema and pleural fluid
	(S21) Physical principles of gas exchange: diffusion of gases through the
	respiratory membrane
	(S22) Transport of oxygen and carbon dioxide in blood and tissue fluids
	(S23) Integration (respiratory system)
	(S24) Secretory functions of the alimentary tract: secretion of salival gastric
	and nancreatic secretion
	(S25) Secretory functions of the alimentary tract: hile secretion and intestinal
	secretion: absorption of water and ions
	(S26) Energetics and metabolic rate
	(\$27) Integration (alignmentary tract and metabolism)
	(S28) Anterior nituitary hormones
	(S29) Thyroid hormones
	(S30) Insulin and glucagon
	(S31) Blood glucose regulation, diabetes mellitus
	· · · · · · · · · · · · · · · · · · ·

					 (S32) Calcium and phosphate metabolism, Bone and teeth physiology (S33) Parathyroid hormone, calcitonin and vitamin D (S34) Synthesis of adrenocortical hormones, functions of mineralocorticoids (S35) Adrenocortical hormones; stress (S36) Integration (endocrinology) (S37) Reproductive and hormonal functions of the male (S38) Female physiology before pregnancy and female hormones (S39) Integration (reproduction) (E1) Transport through cell membranes 										
	Exerc	cises			(E1) Basic (E2) F	physics of i Recording a	nrougn ce membrar nd vector	ell memt ne poten rial anal	oranes itials ysis of ECG						
					(E3) I (E4)	nteractive p Measuring	ohysiolog of the a	y 9.0: Ca rterial p	ardiovascular pressure and	system periph	eral pul	se rate,	heart		
					soun (E5) E (E6) I	ds Electrocardi Kidney prob	ogram re Iem solvi	petition	, orthostatic 1 cases	test					
					(E7) S (E8) T	Spirometry	test cycle tes	st; Effect	of exercise o	n arteri	al pressi	ure			
					(E9) ((E10)	(E9) OGTT- Oral Glucose Tolerance Test(E10) Blood typing(E11) Hematology (erythrocyte count hemoglobin and hematocrit;									
					(E11) hema	Hematolo atological in	ogy (ery dices)	throcyte	e count, ne	emoglot	oin and	i nema	tocrit;		
Language	Englis	sh													
E-learning	Classe comb	es are ta bined (liv	aken in p ve and o	oerson. online) o	. If nec or com	essary, lecti pletely onli	ures, sem ne via e-l	ninars ar earning	nd part of the platforms (Go	exercise pogle M	es can ta leet) up	ike place to a max	e kimum		
Teaching methods	Teach	ning, inte	eractive	and ac	ctive-e	xperiential.									
				Ту	pes of	assessment	t (indicate	e - Bold)	1						
	Т	Type of r	ore-exai	minatic	n ohli	n obligation Type of exam									
		Type of pre-examinat ninar essay/report pr				Bation				1,100					
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midterm se	eminar e baper	essay/re	port A	prac	ctical/p	oroject task	and shar	other e in the	written exam grade		oral exam	prac	tical		
midterm se	eminar e baper obligation	essay/re	A	prace Illocation earning	ctical/r	CTS credits Hours	and shar	other e in the oad	grade Share in	n ECTS	oral exam	prac	tical rade		
midterm se	obligation	essay/re	port A Le outce	prace Ilocatic earning ome co	ctical/r on of E	CTS credits Hours	and shar of workl	other e in the oad	grade Share in 6	n ECTS	oral exam St	prac	tical rade		
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	Medicine University of						
	Mostar, 2020.						
Additional	Lecture notes	х	х				х
	Linda Costanzo:						
	Physiology, 7 th edition,	х	х		х		
	2021						
Additional co	urse information						

Additional course information

Physiology classes contain 180 hours and are taken over 11 weeks, which includes the post-class examination period (preexam). The class is divided into two approximately equal parts: Physiology I (P1) and Physiology II (P2). The teaching consists of

lectures, seminars and exercises. At the end of each week a seminar entitled "Repetition and examination of passed material" is organized. In this part of the course, the topics are repeated and consolidated based on problem solving and test questions.

During classes from seminars and exercises, **knowledge is continuously checked**. To students who demonstrate exceptional knowledge of the learning material covered in the seminar or motivation and understanding in the exercises additional points will be awarded (bonuses), which will be added to the points on the final exam. **Weekly tests** are held at the beginning of each week, and there are 6 weekly tests in total. They contain 20 questions related to the previous week's topics. On these tests, knowledge is evaluated as follows: for a grade of 5, the student receives 2.0 points, for a grade of 4, the student receives 1.5 points, for a grade of 3, student receives 1 point, and for a grade of 2, student receives 0.5 points. The maximum number of additional points that student can earn for one partial exam is 6, and it is obtained on the basis of the sum of points from classes and the results of weekly tests.

Partial exams are held about a week after the lessons from P1 or P2. They consist of 80 test-questions with multiple choice of answers (one of the five offered answers is always correct). To pass the exam (grade sufficient), the student must answer 55% of the questions correctly, i.e., must obtain at least 44 points.

According to the Rulebook on Studying at the University of Mostar grades are assigned as follows:

0-54% insufficient (1);

55-66% sufficient (2);

67-78% good (3);

79- 90% (very good 4);

91-100% excellent (5).

The colloquium of the exercises refers to the skill of measuring arterial pressure. The student should demonstrate the ability to measure arterial pressure and interpret the measured values.

The practical exam consists of several tasks where the understanding of ECG, respiratory analysis, stress tests, OGTT, blood types, ABS and other units that were processed and taught using active-experiential methods at exercises. The exam is divided into two parts, the knowledge of ECG is evaluated separately, and the other parts separately, due to the importance of ECG interpretation for everyday practice. The minimum for passing is 80% of correctly solved tasks.

The partial exams, colloquium and practical exam, when passed, are acknowledged during the academic year.

The oral exam includes the most important, integrative units of overall physiology. In the final exam, it is not details that are required, but integrative knowledge that is essential for understanding the whole subject, medical practice and others courses. The condition for taking the oral exam is that the student has passed all partial exams and the colloquium/practical exam of exercises. Students who have passed the partial exams and the colloquium/practical exam during the class will be admitted in the pre-exam term and subsequent terms (when applicable) directly to the oral exam, which is counted as taking the exam.

The final grade is calculated as the arithmetic mean of the grades obtained on the two partial exams and the grade obtained on the oral exam. That is: (P1+P2+Oral)/3.

Study	MEDICAL STUDIES	5 IN ENGLISH							
programme									
CYCLE	INTEGRATED	Туре	UNIVERSITY						
Study track	-	Module	-						
Year of study	2	Semester	IV						
Course title	MEDICAL PSYCHOLOGY	Course code	MFMSE402						
ECTS	3.5	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
	1		20	20	20	0			
Course objectives	 To achieve stud the human soul. To achieve stude 	ents' understand ents' understandi	ling of psychological fu	nctions and to exp	and existing kn hology	owledge about			
	Learning outcome	e (LO)	0 17	0/ 1/ 1	Course	LO code at the			
Course learning	Student:				learning outcome code	study program level			
outcomes	Describes and exp	plains basic psych	nological functions		IU- MFMSE402-1	IU-MSE1 IU-MSE2			
	Describes and exp	plains the basics o	of psychopathology		IU-	IU-MSE4			
	Analyzes and con	nects various nsv	chological functions an	d processes that	INFINISE402-2	IU-MSE2			
	help in better und	derstanding of ps	vchology	u processes that	MFMSE402-3	IU-MSE7			
	Describes and ana	alyzes psychopatl	hology		IU-	IU-MSE4			
					MFMSE402-4	IU-MSE6			
	Analyzes and inte	erprets psycholog	gical disorders that are	important for a	IU-	IU-MSE3			
	functioning	iding of psychol	logical processes and	overall human	WIFW3L402-3	10-1013213			
	Tunctioning								
Prerequisites for the course	In accordance wit	h the Rulebook o	n the Integrated Studie	es at the School of	Medicine Unive	rsity of Mostar.			
enrolment		r ! -							
Course	Week/shift	1 Introduc	tion to nouchology						
content	Lectures	2 Personal	lity						
		3. Normalit	ty						
		4-6. General	, psychopathology						
		7. Stress							
		8. Aggressive	eness						
		9,10. Anxiety							
		12 Doctor-n	e atient relationshin						
		13. Patient's	reaction to the disease	2					
		14. Psycholog	gical manifestations of	serious somatic d	iseases				
		15. Commun	ication with terminally	ill patients					
		16. Psychoth	erapy						
		17. Group pr	ocesses in psychology						
		18. The psyci	nology of pain						
		20. Doctors	personality						
	Seminars	1. Anxiety	· ·····						
		2. Aggressi	veness (assertiveness)						
		3. Defense	mechanisms						
		4. Personal	lity						
		5. Positive	emotions						
		6. Negative	e emotions						
		7. Thought	disorders						
		8. Percepti	on disorders						
		 Suicidali 	ty						

					10. St	ress in	medicine							
					11. Si	oirituali	tv and mer	ntal disc	orders					
					12. P	svchoth	erapy							
					13. R	esilienc	e							
					14. T	ne relat	e ionship be	tween t	he sexes					
					15. D	octor's	personality	/						
					16. P	svcholo	gy and poli	, itics						
					17. P	svcholo	gy of sport							
					18. E	motion	s disorders							
					19. H	istorv o	f psycholo	gv						
					20. N	lournin	g	57						
							0							
		Exer	cises	1-2	0. Prese	entatio	n of patient	ts with	different	psychopatholo	ogies			
Language		Engli	ish											
E-learning		Class	ses are ta	iken in	perso	n. If ne	cessary, le	ctures,	seminars	and part of	the exe	ercises c	an take	place
		com	ombined (live and online) or completely online via e-learning platforms (Google Meet) up to a maximum											
Taaabiaa		Of 20	accordance with the decision of the organizational unit.											
reaching		reac	eaching methods (lectures, presentation, demonstration).											
methous			Types of assessment (indicate- Bold)											
	Type of pre-examination obligation													
midterm	Sem	inar	ar Essav/report Practical/project task other written oral practical							tical				
materin	par	ber	2000,710	port	110				other	exam		exam	exa	am
	<u> </u>			A	Allocatio	on of EC	CTS credits	and sha	are in the	grade				
Stude	nt ob	ligatio	ns	L	earnin	g	Hours	s of woi	kload	Share ii	n ECTS	Sh	are in g	rade
		-		out	come c	ode							_	
Atte	nding	classe	es					60		2			0	
Pre-exa	m/wr	itten e	exam	IU-N IU-N	/FMSE4 /FMSE4	02-1 02-2		22,5		0,7	'5		50,0%	,)
Fin	al oral	exam	1	IU-N	/FMSE4	02-3		22.5		0.7	'5		50.0%)
			-	IU-N	/IFMSE4	02-4		,-			-		,-,-	-
				IU-N	/IFMSE4	02-5								
-			n total				<u> </u>	105		3,	5		100 %)
					M	ethod c	of calculatir	ng the fi	nal grade					
The final gi	ade is	obtai	ined as th	e arith	metic r	nean of	the grade	s from t	he writte	n exam and th	ne oral	exam.		_
Literature		/+:+ ~	litle		Edi	tion		Lá	anguage	1		Type of I	iteratur	e
(indicate)		(iiie,	autnor, y	ear)	own	otner	croatian	englisn	otner	multilingual	DOOK	article	script	otner
Compulsor	y Ba	abić D.	. & Barba	ric R.	х			х			х			
		edical	psycholo	ogγ,										
	20	nivers	sity of Mostar,											
Additional	Le	ecture	cture notes											
Additional	cours	e infor	rmation						I		1		1	
The Medic	al Psy	cholo	gy course	conta	in 60 ho	ours and	d are taker	over 3	weeks w	hich includes t	he pos	t-class ex	kaminati	ion
period (pre	-exan	n). The	e course o	onsist	of lectu	ires, se	minars and	l exercis	ses.					
	tudents' knowledge is continously checked during seminars and exercises													

Written exam is carried out in the usual way, where students are given questions to which they must give written answers.

Oral exam includes the most important, integrative units of overall medical psychology. The final exam examines detailed integrative knowledge, which is essential for understanding the whole subject, medical practice or for understanding the connection between medical psychology and other subjects.

The final grade is calculated as the arithmetic mean of the grades obtained in the written and the oral exam.

According to the Study Regulations, the final grade is obtained as follows: 0-54% insufficient (1)

55 – 66% sufficient (2)
67 – 78% good (3)
79 – 90% very good (4)
91 – 100% excellent (5)

Study	MEDICAL STUDIES	IN ENGLISH							
Cycle	INTEGRATED	Туре	UNIVERSITY						
Study track	-	Module	-						
Year of study	2	Semester	IV						
Course title	IMMUNOLOGY	Course	MFMSE403						
		code							
ECTS	4.0	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
Course	The aim of the cou	urse "Immunol							
objectives	- to achieve students to	illness	ding of the basic compo	nents and actions	of the immune	system in a			
	that change the fu	nctioning of th	ie immune system in ord	der to comprehend	d the importance	e of their			
	usage in clinical m	edicine							
_	Learning outcome	(LO)			Course	LO code at			
Course	Student:				learning	the study			
outcomes					code	level			
	-defines the nom	enclature, bas	sic properties and com	ponents (genes,	IU- MEMSE402-1	IU-MSE2			
	-describes the m	echanisms of	antigen collection and	nresentation to		III-MSE3			
	lymphocytes, as response	well as antige	n recognition in the ad	cquired immune	MFMSE403-2				
	-describes and ana	lyzes T cell-me	ell-mediated Immunity and humoral immunity, IU- IU-MSE3						
	as well as their exe	ecutive mecha	nisms machanisms of imm	una talaranaa	IVIFIVISE403-3				
	autoimmunity h	naiyzes the	reactions and immun	e responses to	MFMSE403-4	IU-MSE6			
	tumors and tissue	e transplants,	and relates their signifi	cance to clinical		IU-MSE8			
	conditions and int	erventions				IU-MSE15			
	-defines and descr	ibes congenita	l and acquired immunoo	deficiencies	IU- MFMSE403-5	IU-MSE5 IU-MSE6 III-MSE8			
	I					10 111520			
Prerequisites	In accordance with	n the Rulebook	on the Integrated Studie	es at the School of	Medicine Unive	rsity of Mostar.			
for the course									
enrolment	Wook / shift	Ton	ic						
Course		(11)	Innate and acquire	d immunity ty	nes of acqui	red immunity			
content	Lectures	cha	racteristics of acquired i	mmune responses		eu ininunty,			
		(L2)	Immune system cells	and tissues, rev	iew of immune	e responses to			
		mic	roorganisms						
		(L3)	Basic characteristics and	d specificity of inna	ate immune res	ponses, cellular			
		(14)	Components reaction	is and role of in	ells nate immunity	in stimulating			
		acq	uired immune responses	s		in stinuating			
		(L5)	Processing and present	ation of protein a	ntigens, other r	oles of APS and			
		reco	ognition of antigens by B	8 lymphocytes					
		(L6)	Cytokines and chemoki	nes muna rapartaira	. Lymphogyta	dovelopment			
		eme	ergence of diverse antige	en receptors, mati	ration and sele	ction of T and B			
		lym	phocytes						
		(L8)	Phases of T lymphocyte	response, antigen	recognition and	costimulation,			
		bio	chemical pathways of T I	ymphocyte activa	tion				
		(L9)	Complement system	ofTlumphoouto	mediated imm	unity			
		(L10)	1) The executive mechanisms	isms of humoral in	mmunity				

			 (L12) Tolerance mediated by lymphocytes B; Tolerance of commensal microorganisms and fetal antigens; Autoimmunity (L13) Immune responses to transplants (L14) Diseases caused by antibodies, immunocomplexes and T lymphocytes 										
	-	Seminars			(S1) A	ntigens reco	gnized I	by T lym	phocytes, the	wav ho	w APC o	ollect p	otein
					antige	ens, structure	e and fu	inction c	of HLA/MHC m	olecule	es		
					(S2) A	ntigenic lym	phocyte	e recepto	ors; Antibodies	s and T	lymphod	cyte rece	ptors
					(S3) F	unctional res	sponses	of T lym	phocytes to a	ntigen a	and cost	imulatio	n and
					their I	migration in	cellular	immuni	ty responses				
					(S4) I	Phases and	types	of hum	ioral immune	respo	onses, s	timulatio	on of
					iympr	locytes B by	antigen	vmnhoc	vtes and anti	hodios	in hum	oral im	muno
			responses										
					(S6) I	mmunologic	al toler	ance: si	ignificance an	d mecl	hanisms	; Centra	l and
					peripl	heral toleran	ice medi	iated by	T lymphocyte	S			
					(S7) Ir	nmune respo	onses to	o tumors	;				
	_				(S8) T	ypes of hype	ersensiti	vity read	ctions; Early h	perser	nsitivity		
		Exercises			(E1) E	LISA and imr	munoflu	orescen	се				
		English	(E2) Flow cytometry										
F-learning		Classes are h	lasses are held live. If necessary, lectures and seminars can take place combined (live and online) or										
Licuring		completely o	ompletely online via e-learning platforms (Sumarum, Google Meet) up to a maximum of 20%.										
Teaching		Teaching and	Feaching and interactive methods.										
methods													
Types of assessment (indicate - Bold)													
		Type of pre-examination obligation Type of exam											
midterm	semir	nar essay/re	eport	pra	ctical/p	oroject task		other	written		oral	prac	tical
	раре	er		Allocati	on of F(TS credits a	nd share	o in tho	grade		exam		
		Allocation of ECTS credits and share in the grade							graue				
Stude	nt obli	bligations Learning Hours of workload Share in ECTS Share in grade											
Stude	nt obli	gations	L outo	earning come co	de	Hours o	of workle	oad	Share in	ECTS	Sh	are in gi	ade
Stude	nt obli nding c	gations classes	L outo	earning come co	ode	Hours o	of workle	oad	Share in	ECTS	Sh	are in gi	ade
Stude Atte Pre-exam/	nt obli nding c final w	gations classes vritten exam	L outo IU- M	earning come co FMSE40	3-1 –	Hours o	50 70	oad	Share in 1.7 2.3	ECTS	Sh	are in gi 0% 100%	ade
Stude Atte Pre-exam/	nt obli nding c final w	gations classes vritten exam	L outo IU- MI IU- M	earning come co FMSE40 1FMSE40	3-1 –)3-5	Hours o	50 70	oad	Share in 1.7 2.3	ECTS	Sh	are in gr 0% 100%	ade
Stude Atte Pre-exam/	nt obli nding c final w	gations classes vritten exam In total	L outo IU- M IU- N	earning come co FMSE40 IFMSE40	3-1 –)3-5	Hours o	50 50 70 120	oad	Share in 1.7 2.3 4.0	ECTS	Sh	are in gr 0% 100% 100%	ade
Stude Atte Pre-exam/	nt obli nding c final w	gations classes rritten exam In total	L outo IU- M IU- N	earning come co FMSE40 IFMSE40 M muestio	3-1 – 3-5 ethod c	Hours o	50 50 70 120 g the fina	al grade	Share in 1.7 2.3 4.0 (one of the fi	ECTS	Sh	are in gr 0% 100% 100%	lways
Stude Atte Pre-exam/ The writte correct). T	nt obli nding c final w n exam	gations classes vritten exam In total n consists of 5 the exam (gra	IU- M IU- M IU- N O test-o	earning come co FMSE40 IFMSE40 M questio ficient),	3-1 – 03-5 ethod c ns with the stu	Hours o of calculating multiple cho udent must a	50 50 70 120 3 the fina oice of a answer	al grade answers 55% of 1	Share in 1.7 2.3 4.0 (one of the fi the questions	ECTS	red ansv	are in gr 0% 100% 100% vers is a nust obt	lways
Stude Atte Pre-exam/ The writte correct). T least 27 pc	nt obli nding c final w n exam o pass ints. A	igations classes vritten exam In total n consists of 5 the exam (gra ccording to th	L outo IU- M IU- M IU- M o test-o ade suf	earning come cc FMSE40 IFMSE40 Mquestio ficient), r Regula	3-1 – 03-5 ethod c ns with the stu ations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer	al grade answers 55% of t d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red answ ly, i.e. m	ore in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in:	nt obli nding c final w n exam o pass ints. A sufficie	In total In total classes ritten exam In total consists of 5 the exam (gra ccording to th ent (1)	U- M IU- M IU- M O test-o ade suf	earning come cc FMSE40 IFMSE40 M questio ficient), y Regula	3-1 – 3-5 ethod c ns with the stu ations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer	al grade answers 55% of 1 d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red ansv :ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s	nt obli nding c final w n exam o pass ints. A sufficier ufficier	igations classes vritten exam In total n consists of 5 the exam (gra ccording to th ent (1) nt (2)	U- M IU- M IU- M O test- ade suf	earning come co FMSE40 IFMSE40 IFMSE40 M questio ficient), y Regula	ade 3-1 – 03-5 ethod c ns with the stu ations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer 1 obtained	al grade answers 55% of 1 d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red ansv ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 - 54% in: 55 - 66% s 67 - 78% g 20	nt obli nding c final w n exam o pass ints. A sufficier ufficier ood (3	igations classes vritten exam In total n consists of 5 the exam (gra ccording to th ent (1) nt (2)) ed (4)	U- M IU- M IU- M O test- ade suf	earning come cc FMSE40 IFMSE40 M questio ficient), / Regula	3-1 – 3-5 ethod c ns with the stuations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer obtained	al grade answers 55% of 1 d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red ansv	are in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100%	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery go	In total In total In consists of 5 the exam (gra ccording to the ent (1) nt (2)) od (4) ent (5)	U- M IU- M IU- M O test- ade suf	earning come cc FMSE40 IFMSE40 M questio ficient), / Regula	3-1 – 3-5 ethod c ns with the stu ations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer obtained	al grade answers 55% of 1 d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red ansv :ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100%	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery goo excelle	igations classes vritten exam In total n consists of 5 the exam (gra cccording to th ent (1) nt (2)) od (4) ent (5). Title	L outo IU- M IU- M IU- M IU- M iU- M	earning come co FMSE40 IFMSE40 IFMSE40 M questio ficient), / Regula	ations, t	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a answer obtained	al grade answers 55% of t d as follo	Share in 1.7 2.3 4.0 (one of the fi the questions ows:	ECTS	red answ ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate)	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery gole excelle	gations classes vritten exam In total n consists of 5 the exam (gra ccording to th ent (1) nt (2)) od (4) ent (5). Title title, author, y	U- M IU- M IU- M O test-o ade suf e Study	earning come co FMSE40 IFMSE40 questio ficient), y Regula	ade a-1 – ba-5 ethod c ns with the stu ations, t ition other	Hours o of calculating multiple cho udent must a the grade is o	50 50 70 120 3 the fina oice of a oice of a obtained	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ :ly, i.e. m	ore in gr 0% 100% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate)	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery goo excelle (v	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y ull K Abbas A	U- M IU- M IU- M IU- M O test- ade suf ade suf ade suf year)	earning come cc FMSE40 IFMSE40 duestio ficient), / Regula	ade 3-1 – 03-5 ethod c ns with the stu ations, 1 ition other x	Hours o	50 70 120 3 the fination of a construction of	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS 7 3 ve offe correct	red answ ly, i.e. m	are in gr 0% 100% vers is a nust obt	lways ain at e other
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery goo excelle (y Ab H.	gations classes ritten exam In total n consists of 5 the exam (gra ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y bul K. Abbas, A Lichtman.	L outo IU- M IU- M IU- M IU- M IU- M sub study year) ndrew Shiv	earning come cc FMSE40 IFMSE40 duestio ficient), / Regula	and and a second	Hours of calculating multiple chourd and the grade is of the g	50 50 70 120 3 the fina oice of a answer obtained Lan english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS 7 3 ve offe correct	red answ red answ ly, i.e. m	are in gr 0% 100% vers is a nust obt	lways ain at other
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery gole excelle (y Ab H. Pill	gations classes ritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y pul K. Abbas, A Lichtman, lai.	L outo IU- M IU- M IU- M o test-o ade suf e Study year) ndrew Shiv Basic	earning come co FMSE40 IFMSE40 questio ficient), y Regula	ade a-1 – ba-5 ethod c ns with the stu ations, t ition other x	Hours o	50 50 70 120 3 the fina oice of a answer obtained Lan english	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ :ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at other
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficie ood (3 ery goo excelle (y Ab H. Pill Im	gations classes vritten exam In total In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y pul K. Abbas, A Lichtman, lai. munology:	IU- M IU- M IU- M IU- M IU- M IU- M Shiv Basic	earning come cc FMSE40 IFMSE40 Mquestio ficient), / Regula	ade 3-1 – 03-5 ethod c ns with the stu ations, t ition other x	Hours o	50 70 120 3 the fina oice of a answer obtained Lan english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at other
Stude <u>Atte</u> Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery goo excelle (y Ab H. Pill Im Fu	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y oul K. Abbas, A Lichtman, lai. munology: nctions	IU- M IU- M IU- M O test- ade suf e Study year) ndrew Shiv Basic and	earning come co FMSE40 IFMSE40 questio ficient), r Regula	ethod c ns with the stuations, t ition x	Hours of calculating multiple chourd and the grade is of the g	50 50 70 120 3 the fina oice of a answer 5 obtained Lan english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ red answ ly, i.e. m	are in gr 0% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery gole excelle (y Ab H. Pill Im Fui Dis	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y oul K. Abbas, A Lichtman, lai. munology: nctions sorders of	L outo IU- M IU- M IU- M outo N outo ade suf e Study vear) ndrew Shiv Basic and the circle	earning come co FMSE40 IFMSE40 questio ficient), y Regula	ethod c ns with the stu ations, t	Hours o	50 50 70 120 3 the fina oice of a answer 1 obtained Lan english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ :ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at other
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficie ood (3 ery goo excelle (y Ab H. Pill Im Fui Dis Im	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y oul K. Abbas, A Lichtman, lai. munology: nctions sorders of mune System ition	/ear) ndrew Shiv Basic and the sixth levior	earning come cc FMSE40 IFMSE40 duestio ficient), / Regula	ethod cons with the stuations, the stuation other x	Hours of calculating multiple chourd and the grade is of the g	50 70 120 3 the fination of a construction of	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	Type of I article	iterature	lways ain at other
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 ery goo excelle (y Ab H. Pill Im Fu Dis Im ed (PF	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y- oul K. Abbas, A Lichtman, lai. munology: nctions sorders of mune System ition, E piladelphia	/ear) ndrew Shiv Basic and the sixth lsevier	earning come co FMSE40 IFMSE40 questio ficient), y Regula	ethod c ns with the stuations, t ition x	Hours of calculating multiple chourd and the grade is of the g	50 50 70 120 3 the fina oice of a answer 5 obtained Lan english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ red answ ly, i.e. m	are in gr 0% 100% vers is a nust obt	lways ain at
Stude Atte Pre-exam/ The writte correct). T least 27 pc 0 – 54% in: 55 – 66% s 67 – 78% g 79 – 90% v 91 – 100% Literature (indicate) Compulsor	nt obli nding c final w n exam o pass ints. A sufficier ood (3 excelle (y Ab H. Pill Im Fu Dis Im ed (Př 20	gations classes vritten exam In total n consists of 5 the exam (gra- ccording to the ent (1) nt (2)) od (4) ent (5). Title title, author, y oul K. Abbas, A Lichtman, lai. munology: nctions sorders of mune System ition, E hiladelphia, 20.	L outo IU- M IU- M IU- M o test- ade suf e Study (ear) ndrew Shiv Basic and the shiv Basic and the Sixth Isevier USA),	earning come co FMSE40 IFMSE40 questio ficient), y Regula	ethod c ns with the stu ations, t	Hours o	50 70 120 3 the fina oice of a answer 1 obtained Ean english x	al grade answers 55% of t d as follo guage other	Share in 1.7 2.3 4.0 (one of the fi the questions ows: multilingual	ECTS ve offe correct	red answ :ly, i.e. m	are in gr 0% 100% 100% vers is a nust obt	lways ain at

Additional	Teaching materials		х		х					х
Additional co	urse information									
Students are obliged to regularly attend and actively participate in all forms of classes. Students must complete all classes,										
i.e. they can be absent up to the limit prescribed by the Regulations of the School of Medicine University of Mostar.										

Study	MEDICAL STUDIES	IN ENGLISH								
programme										
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module	-							
Year of study	2	Semester	IV							
Course title	PHYSICAL EDUCATION II	Course code	MFMSE404							
ECTS	0.5	Status	OBLIGATORY							
	Teaching hours		Lectures Exercises	Seminars	Practice					
			0 25	0	0					
Course objectives	The aim of the Phy - Expand st - To expan- conseque the prese - To expan- - Train stud exercise i	vsical Education of cudents' knowled d students' know ences of the effect rvation of health d students' know dents for indeper n everyday life.	course is: lge about the impact of kinesiology ad redge about the general process of ex- cts of these processes on the human k a achieved through kinesiology proces redge about ways to solve problems andent work and expand students' kno	ctivities on the leve xercise as well as t body with special r ses. related to exercise wledge about the	el of health. he eference to processes. importance of					
	Learning outcome	(LO)		Course learning	LO code at the					
Course	Student:			outcome code	study program level					
outcomes	Applies warm-up e	Applies warm-up exercises for a particular kinesiological activity. IU-MFMSE404-1 IU-MSE21								
	Independently an exercise in everyda	ndependently analyzes and becomes aware of the importance of IU-MFMSE404-2 IU-MSE21 IU-MSE13								
	It assesses the n	eed and import	ance of daily exercise in order to	IU-MFMSE404-3	IU-MSE13					
	preserve health ar	nd improve the q	l improve the quality of life.							
	It creates an active free time).	e break (an active	e break between studying and during	IU-MFMSE404-4	IU-MSE13					
	It presents toleran	ce, work habits a	and self-discipline.	IU-MFMSE404-5	IU-MSE13					
Prerequisites for the course enrolment	In accordance with	the Rulebook oi	n the Integrated Studies at the School	of Medicine Unive	rsity of Mostar.					
	Week / shift	Topic								
Course	1.	Introd	uctory meeting and familiarization of	students with obl	igations					
content	2.	Struct	ure of the Physical Education class							
	3.	Gener	al preparatory exercises and their app	olication						
	4.	Footb	all – futsal 4+1							
	5.	Soccer	r – small soccer 5+1							
	6.	Handb	ball - jump shot, play in defense, play	in attack						
	7. o	Volley	ball – organization of the game							
	δ. 0	Volley	ball - gallie							
	3. 10	Baske	thall - game							
	10.	Tenni	s – organization of the game in pairs							
	12.	Tennis	s = 1 on 1 game							
	13.	Walkii	ng tour - organization of outdoor excu	irsions						
	14.	Repetition and improvement of general preparatory exercises								
	15. Repetition of the learned content as chosen by the students									
Language	English	·								
E-learning	Sumarum, possibi maximum of 20%.	lity of establish	ing online classes via the platform:	Google meet or	Zoom up to a					
Teaching	- teaching	methods - prese	ntation							
methods	- practical	methods (exercis	ses in the hall, exercises in nature or c	outdoors, exercises	s in the pool)					
	- interactiv	e methods (cor	versation and agreement about th	e class and exerc	cises, dialogue,					
	communi	cation about the	course and mutual, creative ideas ab	out the contents o	of the exercises)					

Types of assessment (indicate - Bold)										
		Тур	e of pre-ex	amination oblig	ation		٦	Type of	exam	า
midterm	seminar	ess	ay/report	practical/p	roject task	other	written	ora	al	practical
	paper						exam	exa	m	
				Allocation of EC	CTS credits and	share in the g	rade			
Student	obligations	S	Learning	outcome code	Hours of v	workload	Share in EC	TS	Share in grade	
Attendin	g classes ar	nd	IU-MI	MSE404-1	2	5	0.5			100 %
prepar	preparing for the IU-MFMSE404-2			MSE404-2						
pr	practical IU-MFMSE404-3			-MSE404-3						
	IU-MFMSE404-4			-WSE404-4 -MSE404-5						
In total					2	5	0.5			100 %
				Method c	f calculating th	e final grade				
Attending	classes and	d pre	paring for	the practical as	signment/exan	n:				
		•		-	-					
Class atter	dance and	class	s activities:							
- ir	regular arri	vals	= 0% grade							
- m	ore than 8	0% a	ttendance	at exercises = 10	00% descriptive	grade				
Exceptiona	lly for stud	ents	who are ex	empted from ex	kercises due to	health or spor	ts (top athletes)	exemp	otions	s, students are
required to	o write a se	mina	ar paper.							
Writing a s	eminar pa	per:								
- tł	ie paper is	not v	vritten = 0%	6 grade.						
- TI	ne work ful	ly me	eets the for	mal and conten	t criteria and is	grammatically	y and spelling co	orrect =	= 1009	% grade
According	ta tha Ctud		aulations t	ha final grada is	abtained as fo	llowe				
	to the stud	19 RE	guiacions, c	ne inai graue is	oblamed as to	nows.				
0 = 34% m	ufficient (2	L) \								
55 = 00 / 0 S 67 = 78%	anneient (2	1								
79 - 90%	erv good ()	1)								
91 - 100%	excellent (-, 5)								

An exception is the subject of Physical Education, where a descriptive grade of "passed" is included in accordance with regular attendance at exercises.

0											
Literature	Title	Edi	tion		Lan	guage			Type of l	iteratur	e
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Educating the Student Body : Taking Physical Activity and Physical Education to School, Harold W. Kohl III and		Х		Х			x			
	Heather D. Cook, 2013.										
Additional											
A 1 1111											

Additional course information

- The student is obliged to regularly attend exercises from the course.

- The condition for entering the final descriptive grade is met with the attendance of at least 80% of the classes held.
- Exceptional efforts at exercises will be rewarded with additional (accumulation) pluses. The maximum number of accumulation points is 2 plus in the record.
- Unexcused absences must be justified with our student doctor and with a request to the course instructor.
- Exempted students are required to write a seminar paper

Study	MEDICAL STUDIES IN	I ENGLISH					
programme		Tupo					
Cycle	INTEGRATED	Type	UNIVERSITY				
Study track	-	Somester	-				
study	5	Semester	V				
Course title	ΡΑΤΗΟΙΟGY	Course code	MFMSF501				
ECTS	16	Status	OBLIGATORY				
	Teaching hours		Lectures	Exercises	Semina	rs	Practice
			70	70	70		0
Course	The aim of the Patho	ology course is t	0:				
objectives	- provide the studen	ts with knowled	lge about the mechanisn	ms of cells, t	issues and orgai	ns inju	ry and
	familiarize them with	h the morpholo	gical changes that under	rlie diseases;	;		
	- train students to re	cognize morph	ological changes in cells,	tissues and	organs by acqu	iring th	neoretical
	knowledge in lecture	es and seminars	; ad autoana af tha diasa	aa baaad ay			lining
	- gain knowledge ab	f microscopic ir	nd outcome of the diseas	se, Daseu or	reparations	es at c	linical
	Learning outcome (I	0)			Course	LO c	ode at the study
Course	Student:				learning	р	rogram level
learning					outcome code		
outcomes	Describes groups of	pathological pro	ocesses, their etiopathog	genetic	IU-	IU-M	SE2
	mechanisms and cor	nects knowled	ge about the pathologica	al hadu	IVIFIVISESU1-1	10-101	5E4
	Structure and function	on of organs, or	gan systems and whole in a second systems and whole in a second systems and whole in a second system of the second	body. nt	11.1-	11 I-M	SE3
	nathological change	s in organ syste	ms with features of path	nological	MFMSE501-2	IU-M	SE4
	processes, morpholo	gical character	istics specific to individua	al organ			
	systems, and applies	this knowledge	e in clinical examples.	0			
	Describes disorders	of the structure	and function of organs a	and organ	IU-	IU-M	SE4
	systems (morpholog	ical changes).			MFMSE501-3		
	Describes certain me	ethods of morpl	nological diagnosis and t	heir:	IU-	IU-M	SE4
	clinical use, as well a	s signs of death	and features of certain	stages of	WIFWI3E301-4	10-101	363
	Becognizes and desc	ribes typical ma	ecrosconic changes in inc	dividual	IU-	IU-M	SF6
	tissues and organs (pathological pro	cesses from general and	d organic	MFMSE501-5		
	pathology) and, base	ed on their char	acteristics, thinks throug	gh			
	differential diagnosis	s and creates a	diagnosis.				
	Shows and describes	the technique	of microscopy of		IU-	IU-M	SE8
	pathohistological pre	eparations, criti	cally analyzes histochem	nical and	MIFINISE501-6		
	diseases	al methods and	uses them in the diagno	DSIS OF			
						I	
Prerequisit	In accordance with t	he Rulebook or	the Integrated Studies a	at the Schoo	l of Medicine U	niversi	ty of Mostar.
es for the							
course							
enrolment							
Course	VVeek / shift		1) Overview of collular re	esponsos to	stress and novia		nuli Causos of
content	And	(LI, J. cell in	iury Sequence of events	s in injury an	id cell death	us stil	nun, causes of
	Seminars	(L2, S2	2) Mechanisms of cell ini	ury and cell	deaths, Cellular	adapt	ations to
		stress	, Intracellular accumulat	ions, Pathol	ogic calcification	n, Cellu	ılar aging.
		(L3, S3	3) Overview of inflamma	tion, definit	ions and genera	l featu	res, Causes of
		inflam	mation, Recognitions of	microbes a	nd damaged cel	ls, Acu	te
		inflam	mation, Mediators of in	flammation.			c .
		(L4, S4	+) IVIORPHOIOGIC patterns	of acute infl	ammation, Out	comes	of acute
		renair		nation, syste	ennic enects of I	IIIdIIII	
		теран	•				

	(L5, S5) Hyperemia and congestion; Edema; Haemorrhage, Hemostasis and
	thrombosis: Thrombosis, Embolism, Infarction, Shock.
	(L6, S6) The normal immune response, Cells and tissues of the immune
	system, Overview of lymphocyte activation and adaptive immune responses,
	Hypersensitivity: Immunologically mediated tissue injury, Rejection of
	transplants.
	(L7, S7) Autoimmune diseases, Immunodeficiency syndromes, Acquired
	immunodeficiency syndrome, Amyloidosis.
	(L8, S8) Nomenclature, Characteristics of benign and malignant neoplasms,
	Epidemiology, Cancer genes, Genetic lesions in cancer, Carcinogenesis: a
	multistep process.
	(L9, S9) Hallmarks of cancer: Self-sufficiency in growth signals; Insensitivity to
	growth inhibitor signals: tumor suppressor genes, Sustained angiogenesis;
	Clinical aspects of neoplasia.
	(L10, S10) Marfan syndrome, Ehlers-Danlos syndrome; Familial
	Hypercholesterolemia, Cystic fibrosis; Phenylketonuria; Complex multigenic
	disorders; Trisomy 21, Klinefelter syndrome, Turner syndrome; Triplet repeat
	mutations: Fragile x syndrome; Congenital anomalies; Perinatal infections,
	prematurity and fetal growth restrictions, RDS, Necrotizing enterocolitis, SIDS,
	Fetal hydrops, Tumors and tumor like lesions of infancy and childhood.
	(L11, S11) Structure and function of blood vessels, Congenital anomalies,
	Hypertensive vascular disease, Vascular wall response to injury,
	Arteriosclerosis, Atherosclerosis, Aneurysms and dissections, Vasculitis,
	Disorders of blood vessels hyper reactivity, Veins and lymphatics, Tumors.
	(L12, S12) Heart failure, Congenital heart diseases, Ischemic heart
	diseases, Arrnythmias.
	(L13, S13) Hypertensive neart disease, valvular neart disease,
	(114, S14) Atelectacis (Collapso): APDS: Obstructive vs Postrictive pulmonary
	diseases: Obstructive lung (airway) diseases: Chronic interstitial (Restrictive
	infiltrative) lung diseases. Pulmonary diseases of vascular origin
	(115, S15) Pulmonary infections: Lung tumors: Pleural lesions: Lesions of the
	upper respiratory tract.
	(L16, S16) Red cell disorder; Bleeding disorders; Complication of transfusion;
	Disorders of the spleen and thymus.
	(L17, S17) White cell disorders.
	(L18, S18) Acute Inflammatory dermatoses; Chronic Inflammatory dermatoses;
	Infectious dermatoses; Blistering (Bullous) disorders; Tumors of the skin.
	(L19, S19) Oral cavity, Esophagus, Stomach.
	(L20, S20) Small and large intestine, Appendix.
	(L21, S21) General features of liver diseases, Infectious disorders,
	Autoimmune hepatitis, Drug and toxin induced liver injury, Alcoholic and non-
	alconolic fatty liver disease, Inherited metabolic liver diseases.
	(L22, S22) Cholestasis syndromes; Circulatory disorders; Nodules and tumors;
	Galistone diseases; Cholecystitis; Carcinoma of the galibladder.
	(L23, S23) Congenital anomalies; Pancreatitis; Pancreatic neoplasms.
	(L24, S24) Clinical manifestations of renal diseases; Giomerular diseases.
	(L25, S25) Diseases affecting tubules and interstitium; Diseases involving blood
	obstruction: Congenital and developmental anomalies: Neoplasms
	(126, S26) Basic structure and function of the hone: Congenital disorders of
	Bone: Metabolic disorders of Bone: Paget disease of hone: Fractures:
	Osteonecrosis: Osteomyelitis: Bone tumors and tumor like lesions
	(L27, S27) Joints: Soft tissue tumors. Disorders of neuromuscular junction
	Myasthenia gravis, Lambert-Eaton syndrome page: Disorders of skeletal
	muscle: Dystropathies: Duchenne and Becker Muscular Dystrophy page:
	Peripheral nerve sheet tumors: Schwannomas and Neurofibromatosis Type 2.
	Neurofibromatosis Type I, Malignant peripheral nerve sheet tumors.

			(L28, S28) Clinical pre	esentations of bre	east disease	e: Inflammator	processes:
			Stromal neoplasms: I	Benign epithelial	lesions: Car	cinoma.	,,
			(L29, S29) Penis; Scro	otum, testis and e	pididymis;	Prostate; Urete	er, Bladder and
			Urethra; Sexually tra	nsmitted diseases	s.	,	,
			(L30, S30) Vulva; Vag	ina; Cervix; Uteru	IS.		
			(L31, S31) Fallopian t	ubes; Ovaries; Di	seases of p	regnancy.	
			(L32, S32) Thyroid; Pa	arathyroid glands		0 /	
			(L33, S33) Pituitary; E	ndocrine pancrea	as; Adrenal	cortex; Adrena	al medulla;
			Multiple Endocrine N	leoplasia Syndror	nes.		
			(L34, S34) Edema; He	erniation and hyd	rocephalus	; Cerebrovascu	lar diseases;
			Central nervous syste	em trauma; Cong	enital malfo	ormation and p	erinatal brain
			injury; Infections of t	he Nervous syste	m.		
			(L35, S35) Genetic m	etabolic diseases;	; Acquired ı	metabolic and	toxic
			disturbances; Neuroo	degenerative dise	ases; Tumo	ors.	
	E	xercises	(E1) Cell Injury, Cell E	Death, and Adapta	ations I		
			(E2) Cell Injury, Cell E	Death, and Adapta	ations li		
			(E3) Inflammation an	d Repair I			
			(E4) Inflammation an	d Repair II			
			(E5) Hemodynamic D	isorders, Thromb	oembolism	n and Shock	
			(E6) Diseases of the I	mmune System I			
			(E7) Diseases of the I	mmune System II			
			(E8) Neoplasia I				
			(E9) Neoplasia II				
			(E10) Genetic and Pe	diatric Diseases			
			(E11) Blood Vessels				
			(E12) Heart I				
			(E13) Heart II				
			(E14) Lung I				
			(E16) The Hematono	ietic and Lympho	id System I		
			(E17) The Hematopo	ietic and Lympho	id System I	I	
			(F18) The Skin		ia oystenni	•	
			(F19) Oral Cavities ar	nd Gi Tract I			
			(E20) Oral Cavities ar	nd Gi Tract II			
			(E21) The Liver and B	iliary System I			
			(E22) The Liver and B	iliary System II			
			(E23) The Pancreas				
			(E24) Kidneys and its	Collecting System	nl		
			(E25) Kidneys and its	Collecting System	n II		
			(E26) Bones and Join	ts I			
			(E27) Bones and Join	ts II			
			(E28) The Breast				
			(E29) The Male Genit	al System and Lo	wer Urinar	y Tract	
			(E30) The Female Re	productive Syster	nl		
			(E31) The Female Re	productive Syster	n II		
			(E32) The Endocrine	System I			
			(E33) The Endocrine	system I			
			(E34) The Nervous Sy	stem II			
Language	English						
E-learning	Classes are	e conducted live.	If necessary, lectures, s	eminars and part	of the exer	rcises can be co	ombined (live
0	and online	e) or completely o	online via e-learning pla	tforms (Google M	leet) up to	a maximum of	20%.
Teaching	Teaching,	interactive and a	ctive-experiential.		· ·		
methods			-				
			Types of assessment (indicate - Bold)			
	Ту	pe of pre-examin	nation obligation			Type of exa	m
midterm	seminar	essay/report	practical/	other	written	oral exam	practical
	paper		project task		exam		
		Allo	Lation of ECTS credits ar	iu share in the gr	ade		

Student obligations		Lea	rning ou code	tcome	Hours of workload		Share in ECTS		Share in grade			
Attendin	g classes					210		-	7			
Pre-exam/pa	artial written	IU-	- MFMSE	501-1	135		4,5		50%			
exam (P1)		10-		501-2								
Pre-exam/n	artial written	10-	IU- MFMSE501-5			135		4	5		50%	
exam	(P2)	IU-	- MFMSE	501-5		155		-	,5		5070	
	. (/	١U	- MFMSE	501-6								
	In total					480		1	.6		100%	
				Method	of calculatin	ng the final	l grade					
The final grad divided by 2).	e is obtained as A detailed desci	the a riptio	arithmeti on is give	ic mean o n in the a	of the grade additional in	s from the formation	two par about th	tial exam ne subjec	is (sum c :t.	of grades	from P1	and P2
Literature	Title	-	Edi	tion		Langua	ge	-		Type of literature		
(indicate)	(title, author year)	r,	own	other	croatian	english	other	multili ngual	book	article	script	other
Compulsory	Kumar V, Abba	IS		Х		Х			Х			
	A, Aster J:											
	Robbins Basic											
	Pathology, 10t	h										
	edition, Elsevie	er,										
	2017.											
	The Internet			х		Х						х
	Pathology											
	Laboratory for											
	Medical											
	Education											
	courtesy of Pro	of.										
	Edward C. Klat	t,										
	MD, Mercer											
	University Scho	loc										
	of Medicine											
	available on											
	https://webpa	<u>th.</u>										
	med.utah.edu/.											
Additional	Additional Power point		Х	х		Х						Х
	presentations											
	used during											
	lecturers and											
	seminars.											

Additional course information

Teaching in Pathology for each unit begins with lectures (L), followed by seminars (S) and exercises (E), according to the topic headings determined for that day. At the seminars, students are given problem tasks (case presentation) which they solve in small groups, at the end of the seminar, knowledge is checked through a quiz-test, and then the correct answers are discussed with explanations of the problem tasks. During the exercises, students examine macroscopic and microscopic images of diseased organs with the help of a computer program, and with a macroscopic examination of diseased organs at the Department of Pathology of UCC Mostar, they independently examine diseased organs. Students also attend the performance of autopsies. The lectures and seminars cover the same teaching units. Students should thoroughly study the prescribed material before the seminar. Seminars or practices from which students were absent must be made up, as they are a condition for sitting the partial and final exams.

The exam is taken in two parts: the first partial test P1 includes general pathology, pathology of blood vessels, heart, respiratory system, blood and blood-forming organs and skin, and the second partial test P2 the remaining part of the pathology of organs and organ systems. Each partial test has 100 questions in the theoretical part. To pass a particular test, it is necessary to achieve 60 correct answers (60% of the solved test).

Test scores and grades: 60-70 sufficient, 71-80 good, 81-90 very good and 91-100 excellent. At the end of each part of the tour, a written exam P1 and P2 is organized. Students are required to pass both partial tests to be able to get final grade. The passed written exam is valid only during the current academic year.

The final grade is calculated as the arithmetic mean of the grades obtained on the two partial exams that is: (P1+P2)/2.

Study	MEDICAL STUDIES IN ENGLISH								
programme									
Cycle	INTEGRATED	Туре	UNIVERSITY						
Study track	-	Module	-						
Year of study	3	Semester	V						
Course title	PATHOPHYSIOLOGY	Course code	MFMSE502						
ECTS	11	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
			45	30	60	0			
Course objectives	Ine main goal of this course is to enable students to apply previously acquired knowledge from all subjects of the first two years of the study especially from the courses of Medical Physiology and Medical Chemistry and Biochemistry I and II, in order to become familiar with the pathological function of the certain organic system, as well as etiopathogenetic mechanisms that lead to functional disorders and development of diseases. The knowledge acquired in this course forms the basis for learning and understanding the diagnostic and therapeutic procedures that students learn in many clinical courses, especially in Internal Medicine.								
_	Learning outcome (LC))			Course learning	LO code at			
Course	Student:				outcome code	the study			
learning						level			
outcomes	Describes the mecha	nisms of actio	on of biological, physic	al and chemical	IU-MFMSE502-	IU-MSE5			
	etiological factors i	n the emer	gence and developme	ent of various	1				
	etiological conditions	in patients (genetic, developmenta	l, autoimmune,					
	degenerative, toxic, n	netabolic, mic	robiological, neoplastic	, traumatic).					
	Explains the gene	ral patterns	of etiopathogenetic	events and	IU-MFMSE502-	IU-MSE4			
	pathophysiological re	eactions of the	e patient at the organis	smic level using	Z				
	Evolution Evolution Evolution Evolution Evolution Evolution and Evolution Ev	the structure	and function of the he	art circulatory					
	respiratory and uro connection between pathogenesis, course	external fa	ms, and evaluates a ctors and patient re of disorders of these sy	nd argues the activity in the vstems, and the	3				
	outcome of the disea	se.	· · · · · · · · · · · · · · · · · · ·						
	Explains disorders o	f the structu	re and function of th	ne metabolism,	IU-MFMSE502-	IU-MSE4			
	digestive and endocri between the effects pathogenesis, course	ne systems, ar of external and degree o	nd evaluates and argues factors and patient re of disorders of these sy	the connection eactivity in the vstems, and the	4				
	Outcome of the disea	se.	arastaristics of the not	hanhusialagigal					
	response to the influe		vical factors	nophysiological	5	10-101324			
	Describes and conne	ects knowledge	ge about molecular, b	iochemical and	IU-MFMSE502-	IU-MSE3			
	cellular mechanisms t homeostasis.	hat are impor	tant in maintaining and	disrupting body	6				
	Combines and applie	s knowledge a	about the disease's clir	nical, laboratory	IU-MFMSE502-	IU-MSE8			
	and imaging feature	s, and based	on etiopathogenesis,	interprets and	7				
	concludes in terms of	differential d	iagnosis.						
	Identifies the impor	tance of scie	ntific methods in the	discovery and	IU-MFMSE502-	IU-MSE7			
	explanation of etiop	oatnogenetic	mechanisms in the d	evelopment of	o				
	uiseases and their usa			cn.					
Prerequisites for the course enrolment	In accordance with th	e Rulebook or	n the Integrated Studies	at the School of N	1edicine Univers	ity of Mostar.			
	Week / shift	Тор	ic						
Course	Lectures	(L1)	Introduction to pathop	hysiology. Genera	al causes and de	velopment of			
content		path	nophysiological process	ses. Homeostatic	maintenance a	nd disorders.			
		Hea	Ith and disease. An inte	grative approach	to the disease.				
	(L2)Principles of the pathogenetic mechanisms.								

	(L3) Inflammation.
	(14) Immunonathonhysiology Immunonathogenetic role of the HIA
	(L4) minunopathophysiology. minunopathogenetic role of the HEA
	system. Insue transplant reactions.
	(L5) Immunodeficiencies. Autoimmunity.
	(L6) Malignant transformation and growth. Disorders of energy
	metabolism.
	(17) Red blood cell disorders.
	(19) White blood cell disorders
	(L9)Endogenous bloactive compounds in disease processes.
	(L10) Disorders of myocardial function. Disorders of the heart valve
	function. Congenital heart defects. Cardiac filling disorders. Cardiac output
	disorders.
	(111) The coronary circulation and ischemic heart disease
	(112) Disordors of arterial pressure. Hypertension, Local tissue perfusion
	disorders.
	(L13) Circulatory Shock.
	(L14) Overview of renal function disorders.
	(L15) Overview of respiratory system disorders.
	(L16) Chronobiological pathophysiology.
	(117) Pathonhysiology of the gastrointestinal system Disorders of the
	(LI) ratiophysiology of the gastionitestind system. Disorders of the
	exocrime runctions of the pancreas - acute and chromic pancreatitis.
	(L18) Disorders of pancreatic endocrine function. Diabetes mellitus.
	(L19) Integral organismic reactions to noxious stimuli.
	(L20) Causes of endocrinopathies. Disorders of pituitary function. Thyroid
	gland disorders.
	(121) Functional disorders of the cortex and medulla of the adrenal gland.
	(122) Disorders of gonadal function
	(122) Disorders of parathyroid glands function. Disorders of calcium
	(L23) Disorders of parachyroid giands function. Disorders of calcium,
	phosphate and magnesium metabolism.
Seminars	(S1) Pathophysiology of DNA: DNA damages, chromosomal aberrations,
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Seminars Exercises/Practicals	 (S1) Pathophysiology of DNA: DNA damages, chromosomal aberrations, genomic instability. Gene expression disorders. Hereditary metabolic diseases. (S2) Functional disorders of subcellular structures. (S3) Function and composition disorders of blood and hematopoietic organs. (S4) Immune hypersensitivities and transfusion reactions. (S5) Disorders of impulse conduction. Heart rhythm disorders. Heart adaptation to the functional load. (S6) Cardiac Failure. (S7) Disorders of arterial pressure and blood flow. (S8) Circulatory Shock. (S9) Disorders of osmolality and hydration of the body. Disorders of extracellular fluid distribution. (S10) Disorders of electrolytic homeostasis. (S11) Pathophysiology of the respiratory system. (S12) Disorders of metabolism of proteins and carbohydrates. Disorders of dietary balances. (S15) Lipid metabolism disorders. Atherosclerosis. (S16) Pathophysiology of the liver. (S17) Disorders of energy metabolism. Disorders of thermoregulation. (S18) Disorders of neurovegetative regulation. Disorders of consciousness. (P1) Leukocytes and the monocyte-macrophage system disorders.
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		(P3) Disorders of the composition and structure of plasma protein.												
		(P4) Hemostasis and blood clotting disorders.												
						(P5)	Electrocard	liograp	hic interp	retation of d	isorder	rs of the	heart i	muscle
						and	coronary ci	rculatio	on - Vector	rial analysis				
		(P6) Cardiac arrhythmias and their electrocardiographic Interpretation										tation.		
		Pathological electrocardiogram.												
		(P7) Disorders of the digestive system and metabolism.												
		(P8) Pathophysiology of the liver and exocrine pancreas.												
		usorders of conception, pregnancy, fetal growth and development.												
						(P10) Endocrino	pathies	5.					
Language	Er	nglis	h											
E-learning	CI	asse	es are held	l live. If	neces	sary, le	ectures, ser	minars	and exerc	ises can be c	ombin	ed (live a	and onl	ine) or
	сс	mp	letely onli	ne via e	e-learni	ng pla	tforms (Goo	ogle Me	eet) up to	max 20%.				
Teaching	Te	each	ing, prese	ntation	is, inter	active	and active.							
methods					Type	as of a	ssassmant (indicat						
			Type of pr	e-exam	ination	n oblig	ation	inuicat	e - Bolu)		Typ	e of exar	n	
midterm	semina	r	essay/re	port	pra	ctical/	project task	(other	written		oral	prad	ctical
	paper		,,		F	,				exam		exam		
				Allo	ocation	of EC	TS credits a	nd shar	e in the g	rade				
Stud	ent oblig	atio	ns	Le	earning	5	Hours	of wor	kload	Share in	n ECTS	Sh	nare in g	grade
				outc	ome co	ode								
Cla	ss attend	ance	e			12 1		135		4,	5	100/		
	Midtorm	<u> </u>)2-1)2-2		30			<u> </u>		10%	
Know	edge and	n Hact	tive	IU-M	VIFMSE502-7			30		1			10%	
partici	pation in	clas	sses	IU-M	FMSE50)2-8		50		1			10/0	·
Pre-ex	am/writte	en e	xam	IU-M	FMSE50)2-3		60		2			40%	1
Eir		va m		IU-M	FMSE50)2-4)2-5		10		1	1.5 20%			
EII		xaiii		IU-M	FMSE50)2-6	·6			1,-	1,5		5070	
		lr	n total				330			11 100%				6
					Met	hod of	[:] calculating	; the fin	al grade					
1) The fina	al grade	is o	btained b	y addir	ng up t	he po	ints gained	during	g classes ((in partial ex	ams ai	nd by kr	nowled	ge and
dedication	during ci	asse	es) to poin n is provid	its gaine	ed on t ddition	ne fina	il written ai	nd oral	exam.					
Literature		JUO	Title		Fd	ition			nguage			Type of	literatu	re
(indicate)	(t	itle,	author, ye	ear)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsor	v Gam	ulin	S. Marušio	ć M.		x	x	x		-	x			
00111p 01001	Kova	čZ.	et all.	,		~	~	~						
	Path	ophy	ysiology (7	′th										
	editio	on),	Medicins	ka										
	nakla	ida Z	Zagreb, 20) <u>14</u> .										
	Guyt	on A	A.C., Hall J.	.E.	x		x	х			x			
	Phys	iolor	ov (14th	dl										
	editio	on),	Elsevier, 2	2020.										
Additional	Teac	hing	, material		х	х	x	х			1			х
	Kova	čZ,	Gamulin S	, et		х	х	х			х			
	all. P	athc	ophysiolog	gy.										
	Study	y gu	ide algorh	ythms										
	- pro	bler	m solver,	2										
	7agre	eb. 7	5Ka Haƙidû 2014:	α,										
Additional	course in	forr	mation		1			1		I		I	L	

The course is performed in the winter semester at the third year of study, in the form of lectures (45 teaching hours), seminars (60 teaching hours), and exercises (30 teaching hours). Lectures last 2, and seminars and exercises 3 teaching hours.

Lectures are a form of classes that provide an introduction and an overview of a thematic unit that is taught in more detail on seminars and exercises.

Seminars and exercises/practicals are a form of classes where students actively review and critically discuss physiological and pathophysiological mechanisms of certain morphological and functional units, which are then explained at the molecular, microenvironmental, organic, systemic and whole-organism levels.

Active participation of students in the curriculum program is further achieved by studying natural integrators of etiopathogenetic events, the so-called etiopathogenetic clusters, performing exercises in the laboratory and on computer programs that simulate pathological conditions and provide clinical correlates of certain diseases

Students are obliged to prepare material that is discussed in lectures, seminars and exercises. In seminars and exercises, students actively discuss physiological and pathophysiological mechanisms with the teacher. Through presentations of clinical cases during the exercises, students have the opportunity to connect pathophysiological conditions with their clinical manifestations.

The teacher evaluates the student's participation in seminars and exercises (demonstrated knowledge, understanding, ability to pose problems, reasoning, etc.). "Earned" points are added to the points obtained in the final exam. **Class attendance** and student participation in all forms of classes are compulsory in accordance with the Law and the Statute of the Faculty of Medicine in Mostar. Accordingly, student attendance at lectures, seminars, and exercises will be regularly checked. Only justifiable absences due to, for example, the illness will be acceptable within the limits allowed and according to the Ordinance on Studies.

Student work will be evaluated during classes and at the final exam. A maximum of (I) 30 grade points can be obtained during classes and up to (II) 70 grade points on the final exam, which totals 100 grade points.

I. The following components are evaluated during classes (up to 30 grade points):

1) acquired knowledge (up to 20 grade points)

2) active participation in classes (up to 10 grade points)

1) acquired knowledge (up to 20 grade points)

During classes, the acquired knowledge will be evaluated by means of two midterm tests comprising 50 questions.

A student may obtain up to **10 grade points** on each test as follows:

Correct answer	Grade points
S	
48-50	10
45-47	9
42-44	8
39-41	7
36-38	6
33-35	5
30-32	4
27-29	3
24-26	2
21-23	1

2) active participation in classes (up to 10 grade points)

Based on oral discussions, activities and knowledge students are graded at all seminars and exercises. Students will be graded in the range of 1 to 5. The score scale is determined according to the absolute distribution of mean values of grades, which is achieved by summing all grades from seminars and exercises (a total of 30 teaching units) and dividing by the number 30 (or less if the student was justifiably absent or not graded). Students can obtain grade points during classes only

if they are **graded** at least on 10 seminars and 5 exercises. The obtained average grade is converted into grade points as shown in the table:

4,26-5,0	10 points
3,76-4,25	8 points
3,26-3,75	6 points
2,76-3,25	4 points
2,00-2,75	2 points

II. Final exam (up to 70 grade points):

The final exam consists of an **oral and a written part**. This exam tests key, specific competencies that have been determined for each unit separately. A student must solve **at least 50% of the test** in order to be able to access the oral part of the final exam.

Who can NOT access the final exam:

Students who missed 20% or more teaching hours. Such a student cannot take the final exam, i.e. he/she must re-enroll in the course in the following academic years.

Students can obtain a maximum of 70 grade points at the written part of the final exam (100 questions) which corresponds to the total number of grade points as shown in the table:

Correct	Grade	Correct	Grade
answers	points	answers	points
97-100	70	70-71	58
94-96	69	68-69	57
91-93	68	66-67	56
88-90	67	64-65	54
86-87	66	62-63	52
84-85	65	60-61	50
82-83	64	58-59	48
80-81	63	56-57	46
78-79	62	54-55	44
76-77	61	52-53	42
74-75	60	50-51	40
72-73	59	<50	0

III. The final grade (a maximum of 100 grade points)

The final grade represents the sum of all grade points obtained during classes and on the final exam. It is based on the absolute distribution according to the following scale:

A (80-100 grade points)	excellent (5)
B (70-79,99 grade points)	very good (4)
C (60-69,99 grade points)	good (3)
D (40-59,99 grade points)	sufficient (2)
	insufficient (1)
F (student who has solved less than	
50% of the test on the final exam)	

IV. The final grade obtained on the written test has to be confirmed at the oral exam

Study	MEDICAL STUDIES IN ENGLISH								
programme		Trune							
Cycle	INTEGRATED	Type	UNIVERSITY						
Study track	-	iviodule	-						
Year of study	3	Semester							
Course title		Course code	MFMSE601						
	PARASITOLOGY								
ECTS	8	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
	-		21	44	30	0			
Course	- to learn the basi	c biological cha	racteristics of microorganis	sms that cause i	infections in hui	nans, their			
objectives	pathogenic prope	rties,	-						
	prevalence and	resistance to e	nvironmental conditions, w	vays of their trai	nsmission, sensi	tivity to			
	antimicrobial drug	gs							
	and the basics of	of human defen	se against infection;						
	- to learn the type	c groups of ant	imicrohial drugs their spec	ctrum and mech	anisms of actio	n and			
	mechanisms of re	sistance	innerobiar arags, their spee						
	of microorganisr	ns to antimicro	bial drugs;						
	- to sample the sv	vab of the nose	and throat independently,	, to determine t	he type of the n	nost common			
	microorganisms								
	according to the	microscopic sli	de or other features, to rea	ad and interpret	t antibiograms a	nd to			
	transmission as	oue of well as the way	of defense against a specif	fic microorganis	m				
	Learning outcome	e (LO)			Course	LO code at the			
Course	Student:	()			learning	study program			
learning					outcome code	level			
outcomes	Lists and describ	es the most in	nportant biological feature	es of normal	IU- MEMSE601-1	IU-MSE1			
	numan nora and p	lains the effect	s of the most important virus	ulence factors					
	of microorganism	s that cause inf	ections in humans.						
	Describes the way	/s of transmissi	on of microorganisms, path	nogenesis and	IU-	IU-MSE5			
	methods of preve	ntion of infecti	ous diseases.		MFMSE601-2				
	Describes the ba	isic mechanisn	ns of human immune def	fense against	IU-	IU-MSE10			
	infection and type	es of vaccines.	tanakial durina armilatan dari						
	names the basic g	groups of antim	sms of resistance of micro	e mechanisms	MFMSE601-4	IO-IVISEII			
	these agents.	id the meenam							
	States, describes	and justifies th	ne applicability of different	t methods of	IU-	IU-MSE15			
	microbiological di	iagnostics and	testing of the sensitivity of	f the bacteria	MFMSE601-5				
	to antimicrobial a	gents and adeq	uately and critically selects	and performs					
	them.								
Prerequisites	In accordance wit	h the Rulebook	on the Integrated Studies a	at the School of	Medicine Unive	ersity of Mostar			
for the course									
enrolment									
	Week / shift	Торі	c						
Course	Lectures	(L1)	Introduction to medical mi	icrobiology. Stru	ucture, physiolo	gy and genetics			
content		of t	ne bacterial cell. Bacterial	antigens. Path	ogenesis of ba	cterial diseases.			
			.mes. Antibactorial chomothe	eraneutic age	nte Ractorial	resistance to			
		(LZ)	microbial drugs.	erapeutic agei	its. Datterial				
		(L3)	Gram-negative spiral bacte	eria - family Spi	rochaetaceae. E	acteria without			
		a c	ell wall - family Mycoplo	lasmataceae. C	Obligate intrace	ellular bacteria:			
		Rick	ettsiaceae, Chlamydiaceae.						
		(L4)	Acid-resistant bacteria - ge	enus <i>Mycobacte</i>	rium.				

Viral antigens and hemage/unnation. Virus replication. IIII antigens and hemage/unnation. Virus replication. IIII Production to mycology. Shape, structure and reproduction of fungi. Fungal diseases - pathogenesis. Antifungal drugs. IIIII introduction to mycology. Shape, structure and reproduction of fungi. Fungal diseases - pathogenesis. Antifungal drugs. IIIII introduction to mycology. Shape, structure and reproduction of fungi. Fungal diseases - pathogenesis. Antifungal drugs. IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			(L5) Introduction to virology. Chemical composition and structure of viruses.
(15) Pathogenesis off-viral diseases. Viral disease. Viral			Viral antigens and hemagglutination. Virus replication.
Chemoprophylaris and therapy of viral diseases. Viral vaccines. Prions. (C) Flowindee, Togovindee, Biogvindee,			(L6) Pathogenesis of viral diseases. Interference and interferon.
ICT / Flowinidae, Togawinae, Bunywinidae, Filowinae. ICE Introduction to mycology. Shape, structure and reproduction of fungi. Fungal diseases – pathogenesis. Antifungal drugs. ICE Introduction to medical parasitology. Bioda and tissue protists - genera: Toxoplasma, Plasmadium, Leishmania. Seminars ISI Genera Neisseri, Moraveli, hormonyhius, Bodretlab, Brucella, ISI Genera Neisseri, Moraveli, hormophius, Bodretlab, Brucella, ISI Genera a Neisseri, Moraveli, hormophius, Bodretlab, Brucella, ISI Genera a Pasiro, Moraveli, hormophius, Bodretlab, Brucella, ISI Genera - Bacilla, Koraveli, Antoma, Isi Antomyces. ISI Genera - Bacilla, Conventatorian, Listeria, Legionella, ISI Maltresistant bacteria. Egnera - Bacilla, Conventatorian, Listeria, Legionella, ISI Multresistant bacteria. ISI Phavistiani Davisses: Provincidae, Paparaviridae, Adenoviridae, Roviridae. ISI Phavistiani Davisses: Paparaviridae, Paparaviridae, Paparaviridae, ISI Multresistant bacteria. ISI Phavisses: Paparaviridae, Paparaviridae, Coronaviridae. ISI Phatavirusses: Paparaviridae, Paparaviridae, Rovirus, Hepatovirus, Lepitorius, Lepitorius, Lepitorius, IE, Chinococcus), Nematada (Trichinella, Trichines, Enterobius, Ascaris). IEI Introduction to the digestive and urogenital system - genera: Giardia, Enterneeba, Cryptosporidium, Trichomanas. ISI Phatavirusses: Paparavirus, Hepatovirus, Hepatovirus, Hepatovirus, ISI Medically Important yeasts and molds. IEI Introduction to progenic cocci. ISI Medicalitation of paperais construction of antibiogram. Principal Babaratory work. Laboratory-acquired infections. Microscopic examination of princi			Chemoprophylaxis and therapy of viral diseases. Viral vaccines. Prions.
[18] Introduction to mycology. Shape, structure and reproduction of fungi. Fungal disease - pathogenesis. Antifungal drugs. Seminars [19] Introduction to medical parasitology. Blood and tissue protists - genera: Toxoplasma, Plasmodium, Leishmania. Seminars [51] Genera Streptozoccus, Staphylozoccus. Enterococcus. (52) Genera Neisseria, Moravella, Haemophilus, Bordetella, Brucella. (53) Grant-negative, curved, rod-shaped bacteria - genera Pseudomonas, Acinetobacter. (55) Gram-negative, curved, rod-shaped bacteria - genera Vibria, Helicobacter, Campylobacter. Anaerolic bacteria - genera (Dstridum, Actinomyces. (56) Genera - dacillus, Corynebractrium, Listeria, Legionella. (57) Multiresistant bacteria. (58) DNA viruses: Paroaviridae. Reproviridae, Adenoviridae, Posviridae. (59) Herpesvinidae. Hepatitis B, C. D Viruses. (51) Orthomysoviridae, Paramysoviridae, Coronoviridae. (51) Na Viruses: Pronoviridae Citerrovirus, Hepatovirus, Caliciviridae, Reviridae. (51) Introduction to microbiological laboratory and the basics of safe (52) Rhodbowridae, Paramysoviridae, Startis. (53) Round and flat worms - Platyheiminthes (Toenia, Echinococcus), Nematoda (Inchinedia, Trichomanas. (51) Introduction to microbiological laboratory and the basics of safe Iaboratory work. Laboratory-acquired Infections. Multroscopic sanal. (52) Repulsabac			(L7) Flaviviridae, Togaviridae, Bunyaviridae, Filoviridae.
Fungal diseases – pathogenesis. Antifungal drugs. (L9) Introduction to medical parsology. Blood and tissue protists - genera: Toxplasma, Plasmodium, Lesismania. Seminars (S1) Genera Streptoccus, Stephylocaccus, Enterodoccus. (S2) Genera Neisseria, Moroxella, Haemophilus, Bordetella, Brucella. (S3) Charateristics of bacteria from the Enterobacteriacee anni, (S4) Gram-negative, curved, rod-shaped bacteria - genera Pseudomonas, Acinetobacter. (S5) Genera - Bactillik, Corynbacterium, Listeria, Legionella. (S7) Multiresistant bacteria. (S8) DA viruses: Provoviridae, Papovaviridae, Adenoviridae, Poxviridae. (S9) Herpesviridae. Hepatitis B, C. D viruses. (S10) RNA viruses: Picornoviridae (Enterovirus, Hepatovirus), Coliciviridae, Reoviridae. (S11) Orthomycoviridae, Retroviridae. (S12) Medicivirus, Retroviridae. (S13) Medicivirus, Retroviridae. (S14) Protists of the digestive and urogenital system - genera: Giardia, Entromoba, Cryptosporidium, Trichomonas. (S15) Round and fat worms - Platyhelminthes (Taenia, Echinococcus), Nematod (Trichnella, Trichviris, Enterobiag, Ascris). Exercises (E1) Introduction to microbiological laboratory and the basics of safe laboratory work. Laboratory-acquired infections of antibiogram. Principles of isolation and identification of progenic occi. (E2) Performance, reading and interpretation of antibiogram. Principles of isolation and identification of progenic occi.			(L8) Introduction to mycology. Shape, structure and reproduction of fungi.
(L9) Introduction to medical parasitology. Blood and tissue protists - genera: Toxoplasme, Plasmandum, Leishmania. Seminars (S1) Genera Streptoroccus, Staphylococcus, Enterococcus. (S2) Genera Neisseria, Moraxella, Haemophilus, Bordetella, Brucella. (S3) Characteristics of bacteria from the Enterobocterioccee family. (S4) Gram-negative, curved, rod-shaped bacteria - genera Vibria, Helicobacter, Compylobacter. Anaerobic bacteria - genera Vibria, Helicobacter, Compylobacter. Nanerobic bacteria - genera Vibria, Hepatovirus), Caliciviridae, Paramyzoviridae, Papovaviridae, Aenoviridae, Posviridae. (S3) DNA viruses: Peronaviridae, Enterovirus, Hepatovirus), Caliciviridae, Reoviridae. (S1) Riverse: Peronaviridae, Coronaviridae, Coronaviridae. (S1) Rhodoviruse, Retroviridae. (S13) Robadoviruse, Retrovirudae. (S13) Medically inportant yaasts and molds. (S14) Protists of the digestive and urogenital system - genera: Giardia, Enterobac, Cryptosporidum, Trichomanas. (S15) Round and flat worms - Platyhelminthes (Toenia, Echinococcus), Nematoda (Trichinella, Trichuris, Enterobius, Ascaris). (E1) Introduction to microbiological laboratory and the basics of safe laboratory work. Laboratory aquired infections. Microscopie camination of principal bacteria shapes. Differential staining in bacteriology. Cultivation of bacteria. Media types. (E2) Performance, creading and Interpretation of antibiogram. Principles of isolation and identification of progenic cocci. (E3) Methods of indirect diagnosis of viral diseases. (E10) Methods of indirect diagnosis of viral diseases. (E11) Diagnostics of toxoplasmosis, leishmaniasis and malaria. (E12) Diagnostics of toxoplasmosis, leishmaniasis and malaria. (E12) Diagnostics of integenia para			Fungal diseases – pathogenesis. Antifungal drugs.
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Image: Signamedia in the second start of the second sta			Acinetobacter.
Campylobacter. Anaerobic bacteria - genera Clostridium, Actinomyces. (S6) Genera - Bacillus, Corprebacterium, Listeria, Legionella. (S7) Multiresistant bacteria. (S8) INA viruses: Provoviridae, Papovaviridae, Adenoviridae, Poxviridae. (S9) Herpesviridae. Hepatitis B, C, D viruses. (S10) RNA viruses: Plcarnoviridae (Enterovirus, Hepatovirus), Caliciviridae, Reoviridae. (S11) Orthomyxoviridae, Retroviridae. (S12) Rhabdoviridae, Retroviridae. (S13) Medically important yeasts and molds. (S14) Protists of the digestive and urogenital system - genera: Giardia, Entamoeba, Cryptosporidium, Trichomonas. (S15) Round and flat weasts and molds. (S14) Introduction to microbiological laboratory and the basics of safe laboratory work. Laboratory-acquired infections. Microscopic examination of principal bacterial shapes. Differential staining in bacteriology. Cultivation of bacteria. (E2) Performance, reading and interpretation of antibiogram. Principles of isolation and identification of progenic cocci. (E3) Identification of bacteria from the genera Neisseria and Haemophilus. (E4) Macroscopic and blochemical identification of enterobacteria. (E5) Secured of direct diagnosis of viral diseases. (E5) Secured of of direct diagnosis of viral diseases. (E6) Sampling, sending and processing samples for the isolation of mycobacteria. (E7) Hospital infections. Multiresistant bacteria.			(S5) Gram-negative, curved, rod-shaped bacteria - genera Vibrio, Helicobacter,
(56) Genera – Bacillus, Corynebacterium, Listeria, Legionella. (57) Multiresistant bacteria. (58) DNA viruses: Pornoviridae, Papovaviridae, Adenoviridae, Poxviridae. (59) Herpesviridae. Hepatitis B, C, D viruses. (51) Ruthiresistant bacteria. (51) Nutrises: Pioronoviridae (Enterovirus, Hepatovirus), Caliciviridae, Reoviridae. (511) Orthomyxoviridae, Paramyxoviridae, Coronaviridae. (512) Rhabdoviridae, Retroviridae. (513) Medically important yeasts and molds. (514) Protisto of the digestive and urogenital system - genera: Giardia, Entamoeba, Cryptosporidium, Trichomonas. (515) Round and flat worms - Platyhelminthes (Taenia, Echinococcus), Nemotada (Trichinella, Trichuris, Enterobius, Ascaris). Exercises (E1) Introduction to microbiological laboratory and the basics of safe laboratory work. Laboratory-acquired infections. Microscopic examination of principal bacteria shapes. Differential staining in bacteriology. Cultivation of bacteria. Media types. (E2) Performance, reading and interpretation of antibiogram. Principles of isolation and identification of bacteria from the genera Neisseria and Haemophilus. (E4) Postistico of bacteria from the genera Neisseria and Haemophilus. (E5) Resudemonas, Campylobacter, Vibrio, Helicobacter – microbiological diagnostics. (E9) Methods of direct diagnosis of viral diseases. (E9) Methods of direct diagnosis of viral diseases. (E11) Diagnostics of toxoplasmiskis leis			Campylobacter. Anaerobic bacteria - genera Clostridium, Actinomyces.
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Student obligations		Learning outcome code		Hours of workload			Share i	Share in ECTS		Share in grade		
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Practic	al exam	IU- M	IFMSE60	01-5		25		0.	8		20 %	
Oral (fin	al) exam	IU- M	IFMSE60	01-1		45		1.	5		30 %	
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All forms of teaching are obligatory. Students are allowed to miss up to 20% of the total course hours justifiable, provided that all absences are compensated through a colloquium. Students must be prepared for seminars and practical work, according to the topics in the schedule. Active participants will be given extra pluses that will be added to the points achieved on written part of the exam (3 pluses = 1 point). Unprepared seminars and exercises will be punished with a minus and must be compensated through a colloquium, because these are condition for partial written exams and final exam. Minuses and all absences must be compensated through a colloquium, before gaining entry to a partial test-exam, and the entire exam. To work in the practice room, students need a white coat, manual, a pen or ballpoint pen, and wooden crayons. No food, drink, cigarettes or chewing gum should be brought into the practice room. After the practical work, students MUST wash their hands thoroughly according to the enclosed instructions and after that must not touch or take out the working materials.

EXAM

The exam in the subject Medical Microbiology and Parasitology is written, practical and oral. During the classes, three partial test exams will be organized. Only students who attend the 6th semester of this academic year, and who have not missed classes or have justified their absences and made up for them with a colloquium, have the right to access the partial exam. PARTIAL WRITTEN EXAMS

The first partial test contains questions from bacteriology (60 questions - 60 minutes). The second partial test contains questions from virology (40 questions - 40 minutes). The third partial test contains questions from mycology and parasitology (30 questions - 30 minutes).

The percentage of correct answers required for a positive grade for each test exam is 60% (bacteriology - 36 points; virology - 24 points parasitology and mycology - 18 points). Passed partial exams are recognized as passed written part of the exam. Results achieved in partial exams and points collected by active participation in classes are valid only during the academic year in which they are passed.

PRACTICAL EXAM

The practical part of the exam consists of 10 tasks, as follows:

- 1. description of 3 microscopic slides, one of which is parasitological
- 2. readings of grown cultures on the 3 media (bacteriological and/or mycological)
- 3. recognition and description of the phenomenon that can be recognized on 3 nutrient media
- 4. reading of antibiogram

ORAL EXAM

The exam card for the oral part of the exam contains five questions according to the following schedule:

- 1. one question from general microbiology (general bacteriology, mycology, parasitology or virology)
- 2. one question from special bacteriology
- 3. one question from special parasitology
- 4. one question from special virology
- 5. one question from special mycology

The final grade is the result of the ratio of grades achieved in written exams (50% of the grade), practical (20%) and oral part of the exam (30% of the final grade).

Study programme	MEDICAL STUDIES II	MEDICAL STUDIES IN ENGLISH								
Cycle	INTEGRATED	Туре	UNIVERSITY							
Track	-	Module	-							
Year of study	3	Semester	VI							
Name of the	PHARMACOLOGY	Subject cod	P MEMSE602	MEMSE602						
subject										
ECTS	11	Status	OBLIGATORY							
Numł	ber of teaching hours		Lectures	Exercises	Seminars	Practice				
			50	35	50	0				
Goals of the subject	The goals of the Pha	rmacology co	ourse are:							
	-Achieve students' u	nderstanding	of general pharmaco	ology, which ir	ncludes: knowled	dge of the drugs				
	origin, the way the o	arugs are adm	inistered, the metab	olism and elin	nination of drugs	s, the				
	mechanisms of actio	on of drugs, tr	he factors that alter c	irugs effects, a	ind the adverse	effects of drugs.				
	-Achieve students' i	nderstanding	of mechanisms of a	ction indicatio	ons clinically sig	nificant side				
	effects, and drug int	eractions of o	lifferent groups of dr	ugs.						
			. .	-						
	-Acquiring knowled	ge about writi	ng prescriptions (Pha	armacography).					
	Learning outcomes	(LO)			Learning	LO on the level				
Learning outcomes	Student:				outcome code	programme				
	Describes and expla	ins the ways o	of drug administratio	n.	IU-	IU-MSE11				
					MFMSE602-1					
	Describes and expla	ains the proc	esses of drug distrib	oution in the	IU- MEMSE602-2	IU-MSE2				
	Dody.	lains tha his	transformation and	alimination						
	processes importan	t for the ther	aneutic as well as ha	rmful effects	MFMSE602-3	10-101525				
	of drugs.									
	Describes and explai	ins the role of	the autonomic nervo	ous system in	IU-	IU-MSE11				
	the effects of drugs	acting on orga	n systems. Describes	and explains	MFMSE602-4					
	the latest therapeut	ic options in	the treatment of mo	tor disorders						
	(antiepileptics, ant	iparkinsonian	drugs), psychotro	pic diseases						
	and other neurodea	enerative dis	antidepressants, and	tipsychotics),						
	Describes and exp	lains the ph	armacology of erg	ot alkaloids.	IU-	IU-MSE11				
	histamine, serotonii	n, NO and ET.		,	MFMSE602-5					
	Identifies general a	nd local anes	thetics, and the met	thod of their	IU-	IU-MSE11				
	administration. Eva	luates good a	and bad properties (of analgesics	IVIFIVISE002-0					
	nractical settings F	nti-infiammat	ory drugs and their a	id analgesics						
	and addictive substa	ances (heroin	, cannabis, psychosti	mulants, and						
	ethanol).	, ,		,						
	Describes the me	chanisms o	f action, indicatior	ns, clinically	IU-	IU-MSE11				
	significant side eff	ects and inte	eractions of drugs	that act on:	MFMSE602-7					
	cardiovascular, dige	stive, respirat	ory and endocrine sy	/stems.						
	antiviral drugs, and	other chemot	herapeutics.	T antibiotics,	MFMSE602-8	IU-IVISEII				
	Describes the use of and the elderly).	f drugs in sp	ecial groups of patie	nts (children	IU- MFMSE602-9	IU-MSE11				
	Describes and expla	ins writing dr	ug prescriptions.		IU- MFMSE602-10	IU-MSE21				
	-									
Prerequisites for course enrollment	In accordance with t	he regulation	on integrated studie	es.						
Contents of the	Week/type	Th	eme							
subject	Lectures	L1	. Introduction, absor	ption, distribu	tion of drugs					

		L2. Metabolism and drug elimination, pharmacokinetics													
		L3. Drug action mechanisms, pharmacodynamics													
		L4. Pharmacology of ANS, cholinergic drugs													
		L5. Pharmacology of ANS, adrenergic drugs													
		L6. Pharmacology of histamine, serotonin, and ergot alkaloids, NO													
		17 Anxiolytics sedatives – hypnotics antienilentics													
		18 Pharmacotherapy of most common neurodegenerative diseases													
		LO. Antinguchatics, antidoproscants													
		L3. Antipsychotics, antidepressants													
		L10. Opioid analgesics													
		L11. General and local anestnetics													
		L12. Addictive substances (neroin, cannabis, psycho stimulants,													
		alcohol)													
		L13. Drugs for hypertension treatment													
		L14. Vasodilators in angina pectoris treatment													
		L15. Diuretics													
		L16. Drugs for heart failure treatment													
		L17. Drugs for treatment of arrhythmias													
		L18. Drugs for asthma treatment													
		L19. Drugs for coagulation disorders													
		L20. Pancreatic hormones and drugs in diabetes treatment P21.													
		Antimicrobial drugs													
		L22. Drugs for malignant diseases treatment													
		L23. Immunopharmacology													
		L24. Drugs for peptic disease and laxatives													
		L25. Antidiarrhoeal drugs, antiemetics, and inflammatory bowel													
		disease drugs													
	Seminars	S1. New drug discoveries, generic drugs, and pharmacogenomics													
		S2. Drug's final outcome in the organism													
		S3. Actions of drugs, mechanisms of side effects													
		S4. Cholinergic drugs													
		S5. Adrenergic drugs													
		S6. Anxiolytics, antiepileptics, neurodegenerative diseases													
		S7. Antipsychotics, antidepressants													
		S8. Nonsteroidal anti-inflammatory drugs, antirheumatics													
		S9. Pain treatment													
		S10. General and local anesthetics													
		S11. Antihypertensives, drugs in angina pectoris treatment													
		S12 Drugs in cardiac insufficiency treatment													
		S13 Drugs for treatment of arrhythmias													
		S14. Drugs for treatment of dyslinidemias													
		S15. Drugs for treatment of anemias and hematonoietic growth													
		factors													
		S16 Hormones of hypothalamus nituitary gland thyroid gland and													
		510. Hormones of hypothalamas, pitaltary gland, thyrona gland, and													
		osteonorosis													
		osteoporosis													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of funginerotozoa, and holminths													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and olderly patients													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side offects													
		osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects													
	Fuercies	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system													
	Exercises	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system E1. Pharmacokinetics and pharmacodynamics													
	Exercises	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system E1. Pharmacokinetics and pharmacodynamics E2. ANS, isolated muscle													
	Exercises	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system E1. Pharmacokinetics and pharmacodynamics E2. ANS, isolated muscle E3. Psychopharmacology drugs													
	Exercises	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system E1. Pharmacokinetics and pharmacodynamics E2. ANS, isolated muscle E3. Psychopharmacology drugs E4. Analgesics													
	Exercises	osteoporosis S17. Hormones of the adrenal gland cortex and their antagonists S18. Sex hormones and their inhibitors S19. Drugs in diabetes treatment S20. Most important antibiotics S21. Drugs in treatment of fungi, protozoa, and helminths S22. Drugs for viral and TBC infections S23. Application of drugs in children and elderly patients S24. Drug interactions and side effects S25. Pharmacology of the digestive system E1. Pharmacokinetics and pharmacodynamics E2. ANS, isolated muscle E3. Psychopharmacology drugs E4. Analgesics E5. Effects of drugs on cardiovascular system													
						E7. Do	ose calc	ulations	s, ways o	of differer	nt dru	g admi	inistra	ation	
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Language		Englis	sh												
E-learning		Class	es are condu	ucte	d in pers	on. If n	ecessar	y, lectu	res and s	seminars	can b	e held	in co	mbinati	on (live
		and c	online) or co	mple	etely onl	ine via	e-learni	ng plati	forms (G	oogle Me	eet) u	p to ma	aximu	um of 20	%.
Teaching meth	ods	Teach	ning, interac	tive	and acti	ve-expe	erientia								
					For	ms of kr	nowledg	ge testir	ng						
		-	Type of pre-	exar	n obliga	tion					<u> </u>	Туре	of ex	am	
midterm	sem	inar	Essay/repo	ort	pra	ctical/p	roject		other	writt	en	ora	l I	prac	ctical
	pa	ber			6	assignm	ent								
Churcher			Allo	catio	n of ECI	S point	s and si	hare in t	the total	grade					
Stude	nt obli	gation	S		Learnin	g		Hour Io	ad	ECI	S sha	re	(Grade sh	are
Attor	ding			ou	itcome c	oue		125			15				
Midterm/M	/ritton		ujum					135			4,5				
nhar	macoo	ranhv	uiuiii,	IU-MFMSE602-10				15			0,5				
pila	macog	supriy		IU-	MFMSE6	02-1									
				IU-	MFMSE6	02-2									
				IU-	MFMSE6	02-3									
		• • • •		IU-	MFMSE6	02-4		~ ~							
Partial exa	ms/W	ritten	exam	IU-MFMSE602-5 IU-MFMSE602-6				90			3			50%	
				IU-MFMSE602-7											
				IU-	MFMSE6	02-8									
				IU-	MFMSE6	02-9									
				IU-	MFMSE6	02-1									
				IU-MFMSE602-2											
				IU-	MFMSE6	02-3									
0	ral exa	am		IU-	MFMSE6	02-5		90			3			50%	
				IU-	MFMSE6	02-6									
				IU-	MFMSE6	02-7									
				10-		02-8									
		Т	ntal					330			11			100%	
					How t	o calcu	late the	final gr	rade						·
According to th	e Stud	dy Reg	ulations, the	e fina	al grade	is obtai	ned as f	ollows:							
0-54% insufficio	ent (1)				-										
55-66% sufficie	ent (2)														
67-78% good (3	3)														
79-90% very go	od (4)														
91-100% excell	ent (5).			· · ·										
Literature			Title	,	Ed	ition		Lai	nguage			Тур	e of l	iterature	<u>.</u>
		(title,	author, yea	r)	own	other	Cro.	Engl.	other	Multi.	book	arti	icle	script	other
Mandatory	Be	ertram	G. Katz	ung,		х	х	х			х				
	Su	isan	B. Mas	ters,											
	Ar	nthony	J. Trevor: E	Basic											
	ar	nd 	CIII 2020	nical											
		iarmac Bra	2010gy 2020.	N.4		v	v				v	_			
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	Pe	etrišić.	Farmakol	loški											
	pr	iručnik	, Medicii	nska											
	na	klada,	Zagreb, 200)8.											
Complementar	уH.	P. Rai	ng, M.M. D	Dale,		х	х	х			х				
	J.I	VI. Ritt	ter, P.K. Mo	oore											
	Pł	narmad	ology, 2006	j.											
	St	udy i	materials f	rom		х	х	х							х
	le	ctures	(handouts e	etc.)											
Additional info	rmatic	on abo	ut the subje	ct:											

The exam consists of **two partial written exams** that are organized during the Pharmacology class. **Only students who have passed both partial exams can take the oral exam. Students who did not pass a single partial exam during class will have to take the full test on next terms.** Also, to take the final exam in Pharmacology, **the student must pass a written colloquium in Pharmacography** where the skill of writing a doctor's prescription is tested. The colloquium is organized immediately after the Pharmacography round. If the student did not pass Pharmacography at that time, the students can take it during regular outings for the final exam, where a successful result of the colloquium is a prerequisite for taking the Pharmacology exam. **In order to take the final exam, certification of class attendance and fulfillment of other obligations during Pharmacology classes in the ISS system is an obligatory condition.**

Study	MEDICAL STUDIES	S IN ENGLISH								
Cycle		Type								
Course	-	Module	-							
Vear of study	3	Semester	VI							
		Course code								
Course name	PROPEDEUTICS		IVIFIVISEOUS							
ECTS	6	Status	OBLIGATORY							
N	umber of teaching h	nours	Lectures	Exercises	Seminars	Practical				
		• • • • •	30	70	10	0				
objectives	- to achieve the ki of internal medici - to train the stud them how to com - to train students decision-making	nical propaedeutics nowledge and skills ne. ent to independentl municate with the p for clinical reasonir	y take anamnesi patient and his fa	ognize the leading s, clinical examina amily. atained findings, id	signs and syndro tion of the patie entification of p	omes in the field nt, and teach roblems and				
	Learning outcome	es (IU)			Code of	Code IU at the				
Learning	Student:				learning	level of the				
outcomes					outcomes	study program				
	Describes the bas	sics and principles of	of clinical propa	edeutics and its	IU-MFMSE603-	IU-MSE1				
	Significance as the	lios knowledge shou	es of clinical med	tony and imaging						
	features of the o differential diagno	lisease, as well as ostics.	think about and	d conclude with	2	10-101328				
	Takes anamnesis	and performs a clini	cal examination	of the patient.	IU-MFMSE603- 3	IU-MSE14				
	Recognizes leadin	g signs and symptor	ms in internal me	edicine.	IU-MFMSE603- 3	IU-MSE6 IU-MSE14				
	Communicates w medical team app	vith the patient, hi propriately.	is family and n	nembers of the	IU-MFMSE603- 5	IU-MSE9 IU-MSE16				
	Explains basic diffiniternal medicine	ferential diagnoses :	and basic diagno	ostic methods in	IU- MFMSE603- 6	IU-MSE15 IU-MSE17				
	1									
Prerequisites for course enrollment	In accordance wit	h the regulation on	integrated studi	es.						
	Week/Turnus	Гһете								
Contents of	Lectures	P1) General propae	deutics, doctor's	approach to the p	patient General p	propaedeutics.				
the course	1	Physician approach t	to the patient.							
		P2) The role of scier	nce in medicine							
	(P3) Medical error, n	nedical secret, ir	ocurable patient. C	linical skills					
		Medical errors, med	ical secret, Incur	able patient. clinio	cal skills,					
		P4) Evaluation of cli	inical data Evalua	ation of clinical dat	ta Iuria efekteined	findings. The				
		(P5) Meaning of propaed	paedeutics. Clinical re	cal reasoning, Ana	of findings	findings, the				
		P6) Identifying proh	lems and makin	g decisions Delica	te tonics proble	m identification				
		and decision making	, Delicate topics	B decisions, Dened						
		P7) Interpretation o	of findings as a po	ossibility, Develop	ment of differen	t hypotheses,				
	(Clinical decisio makii	ng algorithm, Hy	pothesis testing, I	nterpretation of	findings as a				
		oossibility, Developn	nent of different	hypotheses, Clini	cal decision mak	ing algorithm,				
	Hypothesis testing									
		P8) Doctor-patient (communication:	approach to docto	pr-patient comm	unication				
		(F9) Comprehensive (P10) Examination to	and rocused and	annesis, taking an	annesis in speci	ai situations Itation				
		Examination technic	lues: inspection	auscultation nalm	ation, percussion	n. (P11) Head and				
		neck status Head exa	amination. Neck	examination.						
		P12) Chest status Th	horax examinatio	on						

	(P13) Abdominal status Abdominal examination
	(P14) Limb status Limbs examination,
	(P15) Examination of the external genitalia
	(P16) Propaedeutics of cardiovascular diseases
	(P17) Propaedeutics of respiratory tract Propaedeutics of Respiratory diseases,
	examination of thorax
	(P18) Propedeutics of gastroenterology,
	(P19) Propaedeutics of Liver diseases
	(P20) Propedeutics of pancreatic diseases
	(P21) Propaedeutics of nephrological diseases
	(P22) Propedeutics of immunological diseases
	(P23) Propedeutics of rheumatological diseases
	(P24) Propadeutics of hematological patients
	(P25) Propaedeutics of Endocrine diseases
	(P26) Propaedeutics of Metabolic diseases
	(P27) Propadautics of metrological diseases
	(P2) Laboratory diagnostics
	(P20) Diagnostic methods in internal medicine
<u> </u>	
Seminars	(S1) Analysis of the electrocardiographic recording
	(S2) Chest pain - differential diagnosis
	(S3) Cough, expectoration, haemoptysis
	(S4) Urine analysis, lab tests in nephrology
	(S5) Bleeding from the digestive system
	(S6) Jaundice - differential diagnosis
	(S7) Diagnostics in immunological diseases
	(S8) Diagnostics of hematological diseases
	(S9) Diabetes mellitus
	(S10) Importance of arterial hypertension
Exercises	(V1) medical history
	(V2) status
	(V3) heart sounds - auscultation
	(V4) Measurement of arterial pressure and pulse
	(V5) Monitoring of acid-base status
	(V6) central vein placement, brownie
	(V7) monitoring of central venous pressure
	(V8) Ecg
	(V9) Ergometry, coronary angiography
	(V10) placement of urinary catheter
	(V11) monitoring of patients in the intensive care unit
	(V12) Spirometry, bronchoscopy
	(V13) liver highsy
	(V14) differential diagnosis of bleeding from the digestive tract test for occult bleeding
	digitorectal examination
	(V15) monitoring of natients in coronary intensive care
	(V16) diverging status of the national endogrinological tests
	(V17) bistory and status of nationts with myocardial infarction
	$(\sqrt{12})$ history and status of patients with angina postoris
	(V10) history and status of patients with heart failure
	(V19) history and status of patients with arterial hypertension
	(V21) history and status of patients with COPD
	(V21) history and status of patients with COPD
	(V22) history and status of patients with astrima
	(V23) history and status of patients with pneumonia
	(v24) nistory and status of patients with lung tumors
	(V25) history and status of patients with gastrointestinal bleeding
	(V26) history and status of patients with liver cirrhosis
	(V27) history and status of patients with liver tumors
	(V28) history and status of patients with icterus
	(V29) history and status of patients with nephrotic syndrome
	(V30) history and status of patients with nephritic syndrome

		 (V31) history and status of patients with pyelonephritis (V32) history and status of patients with diabetes (V33) history and status of patients with adrenal gland disease (V34) history and status of patients with thyroid disease (V35) history and status of patients with lymphomas (V36) history and status of patients with leukemia 												
		(V36	b) history	and stat	tus of p	atients	with le	ukemi	а					
		(V37 (V38) history	and stat	us of p	atients	with an with rh	iemia ieuma	toid artl	hritis				
		(V39) history	and stat	us of p	atients	with SL	.E						
		(V40) history	and stat	us of S	y Sjogr	en's pat	ients						
Language	English langua	ige			<u> </u>		<u> </u>		<u> </u>				<u> </u>	
E-learning	Classes are co	nducte	d live. If r	necessar	y, lectu	ires an	d semin mum of	nars ca	in take	place co	ombine	ed (live	e and	online)
Teaching		ractive	and activ	e-experi	iential			20%.						
methods		lactive		e experi	- circian									
			Forms of	f knowle	edge ve	rificati	on (marl	k-Bold	1)					
	Туре с	of pre-ex	kam requ	irement						ty	/pe of	exam		
midterm	seminar es	ssay/	pra	actical/p	oroject		othe	r	writt	en	oral		prac	tical
	Allocation of ECTS points and share in the grade													
Students' o	Students' obligations Code of learning Hours of workload Share in ECTS Share in the grade													
Class att	andanaa	(outcomes	;	110					26		0%		
Pre-exam /P	ractical exam	IU-	MEMSE60	3-3		20	0			3,0 0 7			0% 22 229	
		IU-	MFMSE60	3-5		20	,			0,7			55.557	0
Pre-exam/ Written exam			MFMSE60	3-1		20)			0,7			33.33%	6
			MFMSE60	3-2 3-4										
Final or	al exam	IU-	MFMSE60	3-4		30)			1			33.349	6
		IU-	MFMSE60	3-2										
		IU-	MFMSE60	3-4 2 6	-4 -6									
	Total	10-		5-0		18	0		6 10				100 %	
				Calcula	ting the	e final	grade			<u> </u>			2007	1
The final grade description is g According to th 0-54% insuffici 55-66% sufficie 67-78% good (3 79-90% very go 91-100% excel	is obtained as th given in the addit ne Study Regulat ent (1) ent (2) 3) pod (4) ent (5).	ne arith ional in ions, th	metic me formation e final gra	an of th n about ade is ob	e grade the sub otained	es from oject. as follo	ows:	ı exan	n, practi	cal and	the or	al exa	m. A d	etailed
Literature	Title		Edit	ion			Languag	ge			Тур	pe of v	vork	1
	(title, author,	year)	own	other	CRO	ENG	other	multi	lingual	book	article	e so	ript	other
Compulsory	Hozo I et al. Intermedicine propaedeutics. Clinical Examina and Communica Skills. Croatia	lozo I et al. Internal nedicine ropaedeutics. linical Examination nd Communication			x	x				x				
Additional	Teaching mater	ials		х	х	х				х				
Additional info	rmation about tl	ne cours	se:	• 		• 	• 	• 			•			
The teaching o	f clinical propaed	deutics	consists c	of 110 ho	ours an	d is co	nducted	over	4 weeks	, includ	ing the	e post	-teach	ing
exam period. T	eaching consists	of lectu	ires. sem	inars an	d tutor	ials.								

Knowledge is continuously checked during classes, seminars and tutorials. Students who demonstrate exceptional knowledge at seminars and exercises will be awarded additional points (bonuses) that will be added to the points on the final exam.

To qualify for the oral part of the exam, a student must pass written and practical exam. To pass the test, you need 55% correct answers.

The practical exam consists of several tasks that test the acquired knowledge of history taking, clinical examination of the patient and differential diagnosis.

The oral exam includes parts from general and special clinical propaedeutics. The final exam requires integrative knowledge that is necessary to understand the entire subject, medical practice or to understand other subjects. The condition for taking the oral exam is passing the written test and the practical exam.

The final grade is calculated as the arithmetic mean of the grades achieved in the practical, written and oral part of the exam.

Study	MEDICAL STUDIES	IN ENGLISH										
programme		Tuno										
Cycle	INTEGRATED	Type	UNIVERSITY									
Study track	-	Nodule	-									
Year of study	3	Semester	VI									
Course title	PERSONALIZED	Course	MFMSE604									
		code										
ECTS		Statuc										
ECIS	1.5	Status	UBLIGATORY	Fuereises	Consiners	Dreatice						
	reaching nours		10	10	10	O						
Course	The objectives of the	no Dorconaliza	d modicing and histock		10	0						
objectives	- to provide the stu	ie Personalize	wledge about the conc	ents of personalize	d medicine and t	he role of						
objectives	biotechnology too	ls for diagnosi	s and the creation of tr	eatment tailored to	each natient.							
	- to train the stude	nt to think crit	tically about ethical, so	cial and legal issues	related to the us	se of						
	biotechnology met	hods and the	integration of personal	zed medicine into	the healthcare sy	stem.						
	Learning outcome	(LO)	· · · · · · · · · · · · · · · · · · ·		Course learning	LO code at						
Course	Student:				outcome code	the study						
learning	Describes and sur		f h i - t h h			program level						
outcomes	- Describes and exp	lains the type	s of biotechnology, with	an emphasis on	IU- IVIFIVISE604-1	IU-MSE2						
	used in personalize	ogy and expla		y methodologies		10 10020						
	- Describes and a	nalyses types	of experiments for a	vain of function	IU- MFMSE604-2	IU-MSE3						
	genes/proteins or	loss of function	on and the basics of pl	narmacogenetics		IU-MSE7						
	and pharmacogene	omics	ics									
	- Explains the role of	of bioinformati	nformatics as a crucial tool for storing, analyzing, IU- MFMSE604-3 IU-MSE1									
	interpreting and tra	translating data into clinical practice										
	- Describes and ana	alyses example	es of personalized treat	ment for specific	IU- MFMSE604-4	IU-MSE6						
	chronic diseases											
	- Describes and ex	xplains the ch	allenges related to th	e integration of	IU- MFMSE604-5	IU-MSE12						
	personalized medic	cine into existi	ng health systems, from	the perspective								
Prerequisites	In accordance with	the Rulebook	on the Integrated Stud	ies at the School of	Medicine Univer	sity of Mostar.						
for the course												
enrolment												
-	Week / shift	Тор										
course	Lectures	(P1) (P2)	The main access of	nnology A modicino (norce	nalizad pradiati	a proventive						
content		(PZ)	narticipatory)	²⁴ medicine (perso	nalized, predicti	ve, preventive						
		(P3)	Molecular diagnostics	as basis - Labora	tory methods fo	r nersonalized						
		med	dicine			personanzea						
		(P4)	The basics of pharmac	ogenomics and pha	armacogenetics							
		(P5)	Integration of persona	lized medicine into	the existing hea	thcare system						
	Seminars	(S1)	The main aspects of m	edical biotechnolog	gy and personaliz	ed medicine						
		(S2)	Personalized medicine	in oncology								
		(S3)	How to make a mo	odel - Loss and	gain of function	experiments						
		(CR	SPR/CAS, knock in/out.)								
		(54)	Pharmacogenetics of	phase I and II meta	ibolism, transpol	ters and drug						
		Fva	mnles of nersonalized n	nedicine based pha	rmacogenetics							
		(S5)	Problems of the integra	ation of personalize	d medicine into t	he health care						
		svst	em from the ethical. so	cial and legal aspe	cts							
	Exercises	(E1)	Using animal models for	or drug developme	nt							
		(E2)	Ethics and genome	·								
		(E3)	Laboratory methods of	personalized med	cine (sequencing	, isolation and						
		ana	lysis of DNA and RNA,	cDNA synthesis, q	PCR, gene expre	ssion analysis,						
		SNP	analysis, flow cytomet	ry)								

						 (E4) Systematic reviews on the topic of pharmacogenomics and pharmacogenetics (Cochrane database) (E5) Examples of personalized treatments for specific chronic conditions, Children and personalized medicine 								
Language		Engl	ish											
E-learning		Clas	ses are co	nducte	ed in pe	rson. I	f necessary	, lectures	, semina	irs and part o	f the tut	orials ca	an be cor	nbined
		(in p	erson and	d onlin	e) or co	mplet	ely online v	/ia e-lear	ning plat	forms (Googl	e Meet)	up to n	1ax 20%.	
Teaching		Теас	ching, inte	eractive	e and a	ctive-e	xperiential							
methods					_			. /		,				
			T		<u></u>	/pes of	assessme	nt (indica	te - Bold)	T	6		
midtorm	comi	nor	Type of p	pre-exa	minatio		gation	k	othor	writtor	Тур	e or exa	m	tical
materm	nan	ndi	essay/re	port	pre	ictical/	project tas	к	other	evam		orai	prac	lical
	pap				Allocati	on of F	CTS credit	s and sha	re in the	grade	'	CAUL	1	
Stude	nt obl	igatio	ons	1	earning	,	Hour	s of work	load	Share i	n FCTS	S	hare in g	rade
010.00				outo	come co	ode								
Class	atter	ndand	e				30				1			
Sen	ninar	papei	·	IU- N	IFMSE6	04-1		6		0		10%		
				IU- N	IFMSE6	04-4								
	<u></u>			IU- N	IFMSE6	04-5					2		0.00/	
Pre-exar	n/wr	tten	exam	10- IV 11 I- M	IFIVISED	04-1 04-2		9		0	.3		90%	
				IU- N	IFMSE6	04-3								
				IU- N	IFMSE6	04-4	4							
	IU- MFMS					04-5						_		
In total							<u> </u>	45	<u> </u>	1	.5		100%	
Method of calculating the final grade														
of the grad According t 0-54% insu 55-66% suf	The final grade is obtained as weighting of the grades from the seminar paper (10% of the grade) and the written exam (90% of the grade). According to the Study Regulations, the final grade is obtained as follows: 0-54% insufficient (1)													
67-78% goo	od (3)	. ,												
79-90% ver	y goo	d (4)												
91-100% ex	celler	nt (5)			1									
Literature			Title		Ed	ition		Laı	nguage			Type of	literatur	e
(indicate)		(title,	author, y	ear)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsor	y Ja	in KK	(2015)			х		х			х			
	Te	extbo	ok of											
	Pe	erson	alized											
		eaicii	ne, 2nd											
		rint E	, springer Personaliz	od	v		v						v	
	m	edicir	ne and	cu	^		^						^	
	bi	otech	nology											
Additional	Ha	ays P	(2017)			х		x			х			
	Ac	dvanc	ing Healt	hcare										
	Tł	nroug	h Persona	lized										
	M	ediciı	ne 1st Edi	tion,										
	CF	RC Pre	ess, Taylo	r &										
A -1 -111	Fr	ancis	Group											
Additional	course	e into	rmation	nor ===		o olive	a tania usir	a roleve	+	fielitoreture	b	hing Du	b M c d l	co for
the keywor	iouia dei Di	prepa	alized or r	niar pa	per on	a givei icine a	n topic USIr	ig relevar	it scienti	nc interature	Also st	uning Pu	bould br	ise ior
nresent int	us. Pt erecti	ng fai	nized of p	amnle	s from	nractic	re related t	o the nha	irmacoge	enetics of cer	tain enz	vmes a	nd discu	ss the
practical ap	plicat	ion a	nd examp	oles.				pin				,co, a		

Study	MEDICAL STUDIES IN ENGLISH										
programme			1								
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module	-								
Year of study	3	Semester	VI								
Course title	SOCIAL	Course	MFMSE605								
FCTS	2	Status									
2010	Teaching hours	Status	Lectures F	Exercises	Seminars	Practice					
			20	7	8	0					
Course objectives	 To provid demograp factors (see systems v To provid preventio understar To obtain performa 	e a basic know ohic and epider ocio-economic vithin a framev e skills and atti on in order to d nding of major an understand nce:	ledge on a concept of populati miologic determinants, and wit) and environmental factors, as vork of its interactions; itudes to recognize the importa ecrease the burden of disease strategies for mentioned activi ling of outcome indicators duri	tion health, ir ithin a contex as well as a kr cance of healt within popu vities; ring an evalua	Icluding all its l t of influence owledge on ef h promotion a lation, as well ation of health	biological, of social fects of health nd disease as system					
	Learning outcome	(LO)			Course	LO code at					
Course	Student:	. ,			learning	the study					
learning					outcome	program level					
outcomes		-			code						
	Analyses and expla	ains major and	cornerstone determinants of h	health and	IU- MEMSE605-1	IU-MSE4					
	disease within des	ignated popula	ition (social-medical diagnostic	cs)		IU-MSE21					
	Explains the role of	of health syster	protection	IU-	IU-MSE13						
	and diseases treat	ment		MFMSE605-2							
	Recognizes and ex	plains major st	rategies for health promotion o	or disease	IU- MFMSF605-3	IU-MSE9					
	Analyses health ou	itcome indicate	ors in clinical practice		IU-	IU-MSE11					
				ahta ayah	MFMSE605-4	IU-MSE21					
	as informed conse	nt for medical	treatment etc	gnis, such	MFMSE605-5	IU-MSE16					
						IU-MSE17					
	Understands the	importance of	f data gathering and exchang	ige within	IU-	IU-MSE18					
	health statistics				MFMSE605-6	IU-MSE19					
Prerequisites for the course enrolment	In accordance with	the Rulebook	on the Integrated Studies at th	ne School of N	1edicine Unive	rsity of Mostar.					
	Week / shift	Торі	ic								
content	Lectures	L (1) L (2) L (3) L (4) L (5) L (6) L (7) L (8) L (9) mec L (10 L (12) L (12) L (12) L (12) L (12) L (13)	TopicL (1) Concept and scope of social medicine and public healL (2) Concept of health and diseaseL (3) Social medicine diagnosticsL (4) Needs and demands of the population for health carL (5) Introduction to health system and health policyL (6) Health care measuresL (7) Health institutions network and health care professionL (8) Public health problemsL (9) Introduction to health economics; correlation betweemechanisms and motivations for health services deliveryL (10) Analyses of costs and benefits within health careL (11) Issues of equality and equity in health careL (12) Health statistics and information systemL (13) Primary health care based on the concept of familyimpact on the health of the population								
		L (14	+) Planning and programming i	in nealth care	2						

				L (15) Rights and obligations of the patient in the healthcare system L (16) Status syndrome; how social position affects our health and longevity L (17) The concept of quality in health care; treatment outcomes L (18) Implementation of healthcare reform; content, context, actors and process inars S (1) Health care needs and requirements											
		Sem	inars			S (1) S (2) study Bosn S (3) S (4)	Health care need Health promotic y risk for chronic ia and Herzegov Composition and Cost-effectivene	ds and require on and disease non-commun ina d scope of wo ess of screenin	ements prevention; res icable diseases rk of the family g programs in h	sults of in the I medici ealthca	a fac Feder ne tea are	tor frequency ation of am			
						S (5) S (6) S (7) S (8)	The concept of a European Declar Distribution of s Implementation	active health o ration on the l tress and lifes of the reform	are in family me Rights of Patient tyles across soci of family medie	edicine ts, WH ial class cine in	D, 199 ses the Fo	94 ederation of			
	-	Exer	rcises			 E (1) Knowledge, attitude and behavior regarding health and illness; calculation of cardiovascular risk E (2) Calculation of socio-medical indicators for a specific community E (3) Annual reports on the health status of the population E (4) Public health problem; definition of the problem, size of the problem, 									
						guide E (5) The impact of payment mechanisms of healthcare professionals on cost control, service quality and administration E (6) Evaluation of the work of family medicine teams; list of performance indicators in the FM team E (7) Treatment outcome indicators in family medicine									
Language		Fng	lish												
E-learning		Clas and	ses are co online) o	onduc r com	ted live. If pletely on	e. If necessary, lectures, seminars and part of the exercises can be combined (live online via e-learning platforms (Google Meet) up to a maximum of 20%.									
Teaching methods		Теа	ching met	hods,	demonst	ratio	n, participatory a	ind interactive	e methods, case	analys	is, pro	blem solving			
					Тур	es of	assessment (ind	icate - Bold)							
• •			Type of p	ore-ex	aminatior	n obli	gation		1	Type of	exam	1			
midterm	semir pape	har er	essay/re	port	pract	tical/	project task	other	exam	ora exa	al m	practical			
					Allocation	n of E	CTS credits and	share in the g	rade						
Stude	ent oblig	obligations Learnir outcome				de	Hours of w	vorkload	Share in EC	TS	Sh	are in grade			
Atte	nding c	lasse	es		/		35		1.1			/			
Colloqu	uium (n	nidte	erm)		/		5		0.1			/			
Pre-exar	n/Pract	ractical exam IU-MFMSE6				5-1	10		0.4			30 %			
Pre-exan	n/Oral 1	final	exam	IU-N	1FMSE605 3, 4, 5, 6	5-2,	10		0.4			70%			
		I	n total				60		2			100%			
					Me	thod	of calculating th	e final grade							
According exam as fo	to the S llows:	Stud	y Regulat	ions, t	he final gi	rade	is obtained by ac	lding the poin	ts of the practic	al exar	n and	the oral final			

A = 91-100% 5 (excellent)

B = 79 to 90% 4 (very good)

C = 67 to 78% 3 (good)

D = 55 to 66% 2 (sufficient)

F = 0 to 54% 1 (insufficient)

Literature	Title	Ed	ition		Lan	guage		Type of literature				
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	Detels R et al. Oxford		х		х			х				
	Textbook of Public											
	Health, 4th ed. Oxford											
	2002.											
	Hrabac, B., et al.:	Х		х				Х				
	Social medicine.											
	Textbook of the											
	University of											
	Mostar, (ISBN 978-											
	9958-690-72-3),											
	2010, 225 p.											
Additional	Marmot, M.: Status		Х	Х				Х				
	syndrome; how social											
	position affects our											
	health and longevity.											
	Algoritam, Zagreb,											
	2007, 359 pp. (ISBN											
Additional co	978-955-220-555-0)											
The course "S	ocial Medicine" has a tot	al of 3	5 hours	of contact	classes w	/ith stuc	lents and is co	nducte	d over t	he cours	se of	
one week. Th	erefore, it is not convenie	ent to c	lo a par	tial exam.	It is recor	nmende	ed to continuo	ously ch	eck know	vledge.	а	
colloguium fr	om the exercises, a pract	ical exa	am. and	an oral fin	al exam.	The coll	oquium from	exercis	es and a	ttendan	ice at	
classes are pr	erequisites for a student'	s acces	s to the	final exan	n. The fin	al exam	consists of a	practica	al exam a	and an o	oral	
final exam. Th	ne practical exam involves	s solvin	ig tasks	from the p	oractical p	art of tl	he class, such	as socia	al-medic	al indica	itors,	
treatment outcome indicators, evaluation of the work of the family medicine team, as well as determination of health care												
needs and re	quirements. After passing	the pr	actical e	exam, as w	ell as fulf	illing ot	her obligatior	ıs durin	g classes	s, the stu	udent	

takes the oral final exam.

Study	MEDICAL STUDIES	IEDICAL STUDIES IN ENGLISH											
programme		T											
Cycle	INTEGRATED	Туре	UNIVERSITY										
Study track	-	Module	-										
Year of study	4	Semester	VII										
Course title	NUCLEAR MEDICINE	Course code	MFMSE701										
ECTS	1.5	Status	OBLIGATORY										
	Teaching hours		Lectures	Exercises	Seminars	Practice							
			15	10	5	0							
Course objectives	To acquire knowle their application, s principles as well.	edge about nu specifics of wo	clear medicine diagnostic orking with unsealed sour	c and therapeutic rces of radiation a	procedures, ind nd radiation pro	ication for otection							
	Learning outcome	(LO)			Course	LO code at the							
Course learning	Student:				learning outcome code	study program level							
outcomes	Describes and ex	plains the pr	inciples of radio-pharma	acy, knows and	IU-	IU-MSE1							
	describes the mos	t often used ra	adiopharmaceuticals in n	uclear medicine,	MFMSE701-1	IU-MSE10							
	their production,	physical ch	aracterístics, biodistribu	ition and their									
	Describes and	s. ovnlains the	principles of the pu	Iclear medicine	111-	II I-MSF1							
	instrumentation	and way of	gamma camera creati	ing planar and	MFMSE701-2								
	tomogram image	es. Describes	the principles of S	PECT and PET									
	reconstruction p	rocess and	clarifies additional ber	nefit of hybrid									
	techniques: SPECT	niques: SPECT-CT and PET-CT. IU-MSE8											
	Describes the m	is the most common nuclear medicine diagnostic imaging IU- IU-MSE8											
	systems disorders	ems disorders.											
	Explains the role	s disorders. IU-MSE10											
	condition.		U	υ,	MFMSE701-4								
	Knows and descril	pes the princip	oles of work with open ra	idiation sources,	IU-	IU-MSE11							
	methods of prote	ction against i	onizing radiation and rec	cognizes the fact	MFMSE701-5								
	that in nuclear me	aicine the pa	lient is also a source of ra										
Prerequisites	In accordance with	n the Ruleboo	k on the Integrated Studie	es at the School of	Medicine Unive	ersity of Mostar.							
for the course													
enrolment		_											
Course content	Week / shift	To	oic	-									
Course content	Lectures	(P)) Basic of Nuclear physics	S									
		(P2 (D3	2) Basics of Nuclear medic	r: Padionharmacei	iticals								
		(P4) Radioimmunoassav (RI	A)									
		(P5	i) Nuclear medicine cardi	ology and pulmon	ology								
		(PE) Nuclear medicine in he	matology and gas	troenterology								
		(P7	') Nuclear medicine in uro	ology and nephrol	ogy								
		(P8	8) Nuclear neurology	de este ele est									
		(PS (P1	0) Nuclear medicine in en	adocrinology I									
		(P1	.1) Radiation protection	naoennology n									
		, (P1	2) Radionuclide therapy										
		(P1	.3) Hybrid methods SPEC	T-CT									
		(P1	4) Hybrid methods PET-C		1. 0								
	Cominara	(P1	5) Nuclear medicine diag	gnostics of infection	n and inflamma	ation							
	Seminars	(51) Nuclear medicine oncol	logy I Iogy II									
		(53) Nuclear medicine imagi	ing of musculoske	letal system								
		(54) Nuclear medicine proc	cedures in the dia	gnosis and the	rapy of thyroid							
		dis	ease			-							

				(S5) Myocardial perfusion scintigraphy, RNV and radiocardiography									
	Exercises			(V1) Gamma camera									
				(V2) ⁻	The role of	compute	rs in nuc	lear medicine	9				
				(V3) I	Hot laborat	ory in nu	clear me	dicine					
				(V4) I	Radiation p	rotectior	in nucle	ear medicine					
				(V5) ⁻	Thyroid ulti	rasound a	and FNA	cytology					
				(V6)	Thyroid scir	ntigraphy	1						
				(V7) (Lardiac SPE	CI imagi	ng						
				(V8)	Static scinti	grapny	.,						
				(V9)	Synamic sc	intigraph v pucloar	y modicin						
	English			(010)	Emergenc	y nuclear	medicii	le					
F-learning	Classes	re conc	hucted	in r	person (li	ve) If	necess		s and	somir	ars c	an ha	
Licaring	combined	live and	online)	or con	nletely on	line via e	learnin	a nlatforms ((Soogle	Meet) II	n to ma	vimum	
	20 %.	(inte alla	onnic,	01 0011	ipiecely on		. icuiring	5 plationitis (500510	incer, a			
Teaching	Teaching.	nteractiv	e and a	ctive-e	xperiential.								
methods	0,				P								
			Ту	pes of	assessmen	t (indicat	e - Bold)	1					
	Туре	of pre-exa	minatio	on oblig	gation		,		Тур	e of exai	n		
midterm s	eminar essay	/report	pra	ctical/p	oroject task	(other	written	1	oral	pra	ctical	
	paper		-					exam		exam			
•	•		Allocatio	on of E	CTS credits	and shar	re in the	grade			• •		
Student	obligations	L	earning	5	Hours	s of work	load	Share i	n ECTS	S	hare in į	grade	
		oute	come co	ode									
Attend	ing classes				30			1		0%			
		IU-N	IFMSE70)1-1									
	(IU-N	IFMSE70)1-2		45			-				
Pre-exam/	Pre-exam/Written exam IU-MFMSET					15		0,	5				
		IU-N	IFMSE70)1-4									
	In tota					45		1,	5		100%	6	
			M	ethod	of calculati	ng the fir	nal grade	/					
The final grad	de is obtained c	n the writ	ten exa	ım.		0							
A detailed de	escription is give	n in the a	ddition	al infoi	mation ab	out the s	ubject.						
Literature	Title		Edi	ition		Lar	nguage			Type of	literatu	re	
(indicate)	(title, autho	r, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	Sharp PF, Ger	mell HG		Х		Х			Х				
	and Murray A	D. eds.											
	Practical Nuc	ear											
	Medicine, 3rd	ed.											
	London: Sprin	ger-											
	Verlag, 2005.												
Additional	Maher M.			х		x						x	
	Basic Physics	of				~							
	Nuclear												
	Medicine.200	4											
	7:			Х		Х			х				
	Ziessman HA,												
	O'Malley JP, 1	hrall JH											
	O'Malley JP, 1 and Fahey FH	hrall JH eds.											
	O'Malley JP, 1 and Fahey FH The Requisite	hrall JH eds. 5.											
	O'Malley JP, 1 and Fahey FH The Requisite Nuclear Medi 2014.	hrall JH eds. 5. cine											
Additional co	O'Malley JP, T and Fahey FH The Requisite Nuclear Medi 2014.	hrall JH eds. 5. cine n											
Additional co	2) O'Malley JP, T and Fahey FH The Requisite Nuclear Medi 2014. Durse information f Nuclear medi	hrall JH eds. 5. cine n :ine comp	prises 30) hours	s that are ta	aken over	r one we	ek. The teach	ing cor	nsists of	ectures	,	
Additional co The course o seminars and	2 Jessman HA, O'Malley JP, T and Fahey FH The Requisite Nuclear Medi 2014. Durse information f Nuclear medi exercises. The	hrall JH eds. 5. cine n cine comp written e	prises 30) hours taken a	s that are ta	aken over	r one we	ek. The teach	ing con	nsists of l	ectures	, tions	
Additional co The course o seminars and with multiple	O'Malley JP, T and Fahey FH The Requisite Nuclear Medi 2014. f Nuclear medi exercises. The choice answer	hrall JH eds. cine n cine comp written e s (one of 1	prises 30 xam is ²) hours taken a offere	s that are ta bout a wee d answers i	aken over ek after c is always	r one we ourse co correct).	ek. The teach mpletion. It c	ing con consists	nsists of l of 40 te grade suf	ectures est-ques	, tions , the	
Additional co The course o seminars and with multiple student must	2) Clessman HA, O'Malley JP, T and Fahey FH The Requisite Nuclear Medi 2014. Durse information f Nuclear medi exercises. The e choice answer t answer 60% of	hrall JH eds. cine n cine comp written e c (one of f the gues	prises 30 xam is 7 the five	D hours taken a offere	s that are ta bout a wee d answers i r, i.e., must	aken over ek after c is always obtain a	r one we ourse co correct). t least 24	ek. The teach mpletion. It c . To pass the e 1 points.	ing con consists exam (g	nsists of l s of 40 te grade suf	ectures est-ques fficient),	, tions , the	
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60-69% correct answers correspond to (24-27 points) - sufficient (2)	
70-79% correct answers correspond to (28-31 points) - good (3)	
80-89% correct answers correspond to (32-35 points) - very good (4)	
\geq 90% correct answers correspond to (36-40 points) – excellent (5).	

Study	MEDICAL STUDIES IN ENGLISH								
programme		Tuno							
Cycle Study track	INTEGRATED	Type	UNIVERSITY						
Study track	-	Somester	-						
Year of study	4	Semester							
Course title	RADIOLOGY	Course code	MFMSE702						
ECTS	6	Status	OBLIGATORY						
	Teaching hours		Lectures Ex	ercises	Seminars	Practice			
			35	49	16	-			
Course objectives	The goals of this co radiological equipr knows how to reco familiar with the m	ourse are: that nent, is aware ommend and u nost used radio	the medical student knows the of and knows the basics of the l se protection of staff and patier logical imaging methods.	basics of r biological o nts from io	adiological ana effects of ionizi mizing radiatior	tomy, ng radiation, n, and is			
	Learning outcome	(LO)			Course	LO code at the			
Course learning	Student: learning study program outcome level code level								
outcomes	Knows and descuinformation about	Knows and describes the basics of X-ray physics and uses basic IU- IU-MSE1 Information about radiological contrast agents. MFMSE702-1 IU-MSE17							
	Knows and describ human body and protection against	nows and describes the basics of the biological effect of radiation on the uman body and knows and applies the principles and methods of MFMSE702-2 IU-MSE17 rotection against ionizing radiation.							
	Interprets the basics of normal and pathological radiological findings of organic systems and can describe them through radiological findings (central nervous system, eye, ear, nasopharynx, larynx, maxillofacial area).								
	Interprets the basi organ systems ar (thoracic organs, b system).	cs of normal and can describ reast, heart and	nd pathological radiological fin be them through radiological nd large blood vessels, musculo	ndings of findings oskeletal	IU- MFMSE702-4	IU-MSE8			
	Interprets the basi organic systems a (gastrointestinal, system).	cs of normal a nd can descri hepatobiliary	nd pathological radiological fin be them through radiological system, pancreas and spleen,	ndings of findings urinary	IU- MFMSE702-5	IU-MSE8			
	Demonstrates and techniques.	d applies kno	wledge of newer diagnostic	imaging	IU- MFMSE702-6	IU-MSE8 IU-MSE20			
Durana i ii				Call I C					
for the course	In accordance with	the Rulebook	on the integrated Studies at the	School of	Medicine Unive	ersity of Mostar.			
chronnent	Week / shift	Top	ic						
Course content	Lectures	L1 2 form L2 C L3 S L4 N L5 R L6 C L7 E L8 C L9 T L10 L11 L12 L13	pic X-ray tube structure, high-voltage and low-voltage generators, X-ray mation Diagnostic X-ray devices Special purpose X - ray devices New imaging technologies and telemedicine Radiation prevention and protection Central nervous system Eye, ear, nasopharynx, larynx, paranasal cavities Osteoarticular system and trauma of the osteoarticular system Thoracic organs (lungs, mediastinum) O Heart and great vessels 1 Radiological diagnosis of breast disease 2 Contrast agents in radiology 3 Gastrointestinal and hepatobiliary system						

						L15 Vascular system radiology										
						L16	Vessel dopp	ler ultras	ound							
						L17	ntervention	al radiolo	ogy							
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						ES RAUIATION PREVENTION and protection F6 Central nervous system										
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						E7 Eye, ear, nasopharynx, larynx, paranasal cavities										
							E8 Osteoarticular system and trauma of the osteoarticular system									
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						F11	Radiological	diagnosi	s of hre	ast disease						
						F12	Contrast age	ents in ra								
						F13	Gastrointest	inal and	henato	biliary systen	n					
						E14	Urogenital s	vstem ar	d adren	al glands						
						E15	Vascular svs	tem radi	ology	an Brance						
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			eminars			S2 R	espiratory s	ystem								
						S3 0	steoarticula	, r system								
						S4 G	astrointestir	nal syster	n							
						S5 Ir	terventiona	l radiolog	gy as a n	ninimally inva	sive the	erapy: a	dvantage	es over		
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						S8 U	rogenital sy	stem								
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	4 th edition; William					
	Herring; 2020.					
Additional						

Additional course information

Lectures

All students are required to attend lectures regularly (as prescribed by the teaching regulations), and records will be kept about them.

All students who are absent from the same are obliged to pass the colloquium from the missed part of the material, as a prerequisite for taking the exam (all students will be informed in time about the date of taking the same).

All students are obliged to respect the schedule and space, come to lectures properly prepared and inform the teacher or head of the department if there are any ambiguities.

Exercises

All students are required to attend exercises (as prescribed by the rules of faculty), and records will be kept. All students who miss some of the exercises will be required to pass the colloquium from the missing part of the material, as a prerequisite for taking the exam (all students will be notified in a timely manner, considering this subject).

All students are required to attend the exercises properly dressed (white coat, appropriate clothing and footwear, mask according to current epidemic measures, pay attention to possible symptoms of respiratory infections and your body temperature), on time and in accordance with the schedule and agreement with the assistant who is in charge of exercises.

Seminars

Students are divided into 4 (four) seminar groups. Each group works on 2 (two) seminar topics (theme titles), jointly on searching the literature and making a presentation, and choose one representative who presents the work on the day of the seminar.

The seminars themselves are coordinated by teachers who can ask questions to the presenter and members of the seminar group (which is desirable, in order to determine the activity of the whole group).

When making presentations, use previously established rules (introduction, basics, pathology, radiology imaging...). Written, practical and oral exam

The written exam contains 50 questions, which cover all areas covered by the curriculum. To pass the exam (grade sufficient), the student must answer 55% of the questions correctly, i.e., must obtain at least 28 points.

According to the Rulebook on studying at the University of Mostar, grades are assigned as follows:

0-54% insufficient (1);

55-66% sufficient (2);

67-78% good (3);

79-90% (very good 4);

91-100% excellent (5).

Pre-exam is to be held 8 or more days after the last day of classes.

The winter and summer exam periods are organized by mutual agreement of the teachers, student representatives and the service for the organization of classes, about which students will be informed in a timely manner. Everything related to the exam is regulated in accordance with all valid regulations.

The final grade is calculated as the arithmetic mean of the grades obtained on the written, practical and oral parts of the exam, that is: (Written + Practical + Oral)/3.

Study	MEDICAL STUDIE	MEDICAL STUDIES IN ENGLISH							
programme		-							
Cycle	INTEGRATED	Туре	UNIVERSITY						
Study track	-	Module	-						
Year of study	4	Semester	VII						
Course title	INTERNAL	Course code	MFMSE703						
ECTS	19.5	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
	_		65	195	80	0			
Course objectives	- To train - to achie diseas - To learn	students for ea ve understandi ses. the practical s	arly detection, prev ing of the etiologica kills necessary for t	ention and treatn I and pathogenet he clinical examir	nent of internal med ic processes that lea nation.	icine diseases. d to internal			
Course learning	Learning outcom Student:	Student: outcome code study program							
outcomes	Describes and ex characteristics of	escribes and explains pathohistological and clinical IU-MFMSE703-1 IU-MSE6 aracteristics of internal medicine diseases and how to usethem							
	Discusses about o	he diagnosis and treatment of internal medicine patients. Cusses about clinical, laboratory, and imaging features of IU-MFMSE703-2 IU-MSE8							
	Evaluates and ap diagnostic and th guidelines in the	plies protocols erapeutic proc treatment of ir	and algorithms of p edures according to nternal medicine dis	oreventive, o current seases and	IU-MFMSE703-3	IU-MSE10			
	health preservati Makes decision r internal medicine ensure effective	on. egarding optim e patients base medical care, ti	al therapy and safe d on knowledge and reatment outcomes	ety of therapy in d evidence that and health	IU-MFMSE703-4	IU-MSE11			
	completes histor obtained informa diagnosis.	y and physical ation into estab	examination, and ir lishing a working a	ntegrates the nd differential	IU-MFMSE703-5	IU-MSE14			
	Creates a plan fo laboratory and in and implementat	r management, istrumental tes ion of interven	, inclusion and ratic ts, interpretation o itions for the diagno diseases	nal selection of f their results osis and	IU-MFMSE703-6	IU-MSE15			
	Explains the cont and therapeutic r internal medicine	ent and obtain methods neces patients.	informed consent sary for treatment	for diagnostic procedures in	IU-MFMSE703-7	IU-MSE17			
Prerequisites for the course enrolment	In accordance wi	th the Ruleboo	k on the Integrated	Studies at the Sch	nool of Medicine Uni	versity of Mostar			
	Week / shift	Topic							
Course	Lectures	L(1): I	ntroduction to inte	rnal medicine.					
content	W1	L(2): L	aboratory tests. EF	proteins. ABS. Ur	rine.				
		L(3):E	KG (normal and pat	nologic). ease&walvular die					
	W2	L(4): C	Coronary heart dise	ase.	sease.				
		L(6): H	leart failure.						
	W3	L(7): Peripheral vascular disease.							
	W4	L(8): F	neumonias.						
		L(9): F	ulmonary embolisr	n.					
		L(10):	Lung and bronchia	tumors.					
	W5	L(11):	Espophageal, gastr	ic and duodenal o	diseases.				
	Wb	L(12): L(13):	Liver diseases. Peptic ulcer diseas	e & GI bleeding.					

	W7	L(14): Colorectal cancer.
	W8	L(15): Inflammatory Bowel Disease.
		L(16): Diverticular disease
		L(17): Viral hepatitis.
		L(18): Acute, chronic & AI pancreatitis.
		L(19): Biliary tract diseases.
	W9	L(20): Celiac disease.
		L(21): Anaemias.
	W10	L(21): Malignant disease of the myloid system.
		L(22): Malignant disease of the lymphatic system.
		L(23): Acute leukemias, diagnosisi, clinic presentation and tretment.
	W11	L(24): Thyroid gland disorders.
	W12	L(25): Diabetes.
	W13	L(26): Reproductive system disorders.
		L(27): Rheumatoid arthritis.
		L(28): Polymiositis, dermatomyositis. Vasculitis.
		L(29): SLE. Sy Sjogren.
	Seminars	S(1): Endocarditis, myocarditis, rheumatic fever.
	W1	
	W2	S(2): Arrhytmias, sudden death.
	W3	S(3): Diagnostic procedures in cardiology. Heart electrophysiology.
		S(4): Cardiopulmonary resuscitation.Cardiogenic shock.
		S(5): Pericardial disease.
	W4	S(6): Respiratory insufficiency and emergincies
		S(7): Intestinal lung disease.
	W5	S(8): Bronchitis, asthma and pulmonary emphysema.
		S(9): Arterial hypertension
		S(10): Acute renal faillure
		S(11): Chronic renal failure
		S(12): Drugs and kidney.
	W6	S(13):Glomerulonephritis.
		S(14):Nephrolithiasis.
	W7	S(15): Endoscopic procedures.
		S(16): Tumors of the digestive system.
	W/	S (1/): IBS.
	W8	S(18): Clostridium difficile infection.
	14/2	S(19): Anticoagulant and trombolytic therapy.
	W9	S(20): Hemorragnic syndrom and nemophilia.
	11/10	S(21): Chronic leukemias, diagnosisi, clinic presentation and tretment.
	W10	S(22): Granulocyte, monocyte and macrophage diseases.
	\\/11	S(23): Advanal gland disorders
	W11	S(24): Aureniai giand disorders.
	VVIZ	S(25). Pituliary gland disorders.
		S(20). Falatilyi olu gialiu. S(27): Ostaonorosis, Pagat disaasa8, haraditary connectiva tissua disaasas
		S(27). Osteopolosis, Paget diseased hereditary connective tissue diseases . S(28): Obosity
	W/13	S(28): Obesity S(29): Metabolic diseases
	W15	S(30): Multiple endocrine glands disorders
		S(31): Seronegative spondyloarthritis
		S(32): Sarcoidosis, Amyloidosis,
	Exercise/practical	Exercises are held in all organizational units of the Department of Internal
	work:	Medicine and follow the topics of lectures and seminars.
	W1-W13	
Language	English	
E-learning	The classes are performe	ed in person. If necessary, lectures and seminars can be combined (live and
J	online) up to max. 20%.	,
Teaching	Teaching, participatory a	nd interactive and active-experiential.
methods		

	Types of assessment (indicate - Bold)									
	Ту	/pe of pr	e-exar	nination oblig	ation			Туре	of exam	l
midterm	seminar	essa	y/	practical/p	project task	other	written	oral	exam	practical
	paper	repo	ort				exam			
Allocation of ECTS credits and share in the grade										
Stude	Student obligations Learning outcome code			Hours of v	vorkload	Share in EC	TS	Sh	nare in grade	
Atte	nding classe	25			34	0	11.3			0%
Sen	ninar paper				15	5	0.5		0%	
Pre-e	xam/practio	cal	IU- M IU- M IU- M	FMSE703-2 FMSE703-3 FMSE703-5	30		1			10%
Pre-e	exam/writte	en	IU- M IU- M IU- M IU- M	FMSE703-1 FMSE703-2 FMSE703-4 FMSE703-6	12	0	4			45%
Pre	Pre-exam/oral IU- MFMSE703-1 IU- MFMSE703-2 IU- MFMSE703-4 IU- MFMSE703-6 IU- MFMSE703-7			80)	2.7		45%		
	l	n total			58	5	19.5			100%

Method of calculating the final grade

The internal medicine exam consists of three parts: **written**, **practical** and **oral**. The final grade is obtained as a weighting of the grades from the practical exam (10% of the gr

The final grade is obtained as a weighting of the grades from the practical exam (10% of the grade), written exam (45% of the grade), and oral exam (45%).

The written exam consists of 50 test-questions with one correct answer. According to the Rulebook on Studying at the University of Mostar grades are assigned as follows:

0-54% insufficient (1);

55-66% sufficient (2);

67-78% good (3);

79- 90% (very good 4);

91-100% excellent (5).

After passing the written part, a practical exam follows. The practical exam consists of taking patient anamnesis and clinical status and determining the correct diagnostic and therapeutic algorithm.

Literature	Title	Edi	tion		Lar	iguage		Type of literature			
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Kumar and Clark's Clinical Medicine. 10th Edition. 2020.		х		Х			X			
	Jameson JL et al. Harrison's Principles of Internal Medicine. 20thEdition, McGraw- HillProfessional, 2018.		×		x			x			
Additional	Steven Agabegi. Elizabeth Agabegi. Step up to medicine. 5th edition.		x		x			X			
Additional cou	rse information										

After passing the practical exam, the oral part follows. The oral exam is based on the recommended literature.

Study	MEDICAL STUDIES	MEDICAL STUDIES IN ENGLISH							
Cycle		Туре							
Study track		Module							
Yoar of study	1	Somostor	-						
fear of study		Semester							
Course title	NEUROLOGY	Course code	MFMSE801						
ECTS	6	Status	OBLIGATORY						
	Teaching hours		Lectures	Exercises	Seminars	Practice			
	T		24	43	23	0			
Course objectives	- To achiev - To expan mechanis laborator	ve knowledge of d the knowledg sms, clinical sym ry findings and r	the basic principles of N e and skills necessary fo nptoms, differential diag rational treatment of the	Veurology r understanding nostic conclusior most common r	the pathophysic ns, critical evalu- neurological disc	blogical ation of eases.			
Course learning	Learning outcome (LO) Course LO code at the Student: learning study program outcome code level								
outcomes	Describes and rela function of centra	ates knowledge I and periphera	about the neuroanator I nervous system.	my and normal	IU- MFMSE801-1	IU-MSE2			
	Critically judges ar	itically judges and explains pathophysiological mechanisms of the most IU- IU-MSE4							
	Explains and inter most common neu	prets the etiolo urological disea	gical factors of clinical co ses.	onditions in the	IU- MFMSE801-3	IU-MSE5			
	Connects and a neuroimaging mar and interprets and	onnects and applies knowledge about clinical, laboratory and IU- IU-MSE8 euroimaging manifestations of the most common neurological diseases MFMSE801-4							
	Evaluates and ap diagnostic and the for the treatment	oplies the prot erapeutic proce of neurological	cocols and algorithms edures according to cur diseases.	of preventive, rent guidelines	IU- MFMSE801-5	IU-MSE10			
	Conducts a med neurological exam differential diagno	dical interview ination to obta osis.	, comprehensive histo in information relevant f	ory-taking and or working and	IU- MFMSE801-6	IU-MSE14			
	Develops an appro laboratory and ins and interventions neurological disea	opriate plan for trumental exam for the diagnos ses.	management and ration inations, interpretation is and treatment of the	nal selection of of their results, most common	IU- MFMSE801-7	IU-MSE15			
	Lists and classifies recommends a the	by importance erapeutic appro	emergency conditions in ach.	neurology and	IU- MFMSE801-8	IU-MSE8 IU-MSE14 IU-MSE15			
Prerequisites for the course enrolment	In accordance with	n the Rulebook (on the Integrated Studies	s at the School of	Medicine Unive	ersity of Mostar.			
	Week / shift	Торі	с						
Course	Lectures (L)	(L1)	Introduction to Neurolog	gy					
content		(L2)	Functional neuroanatom	ıy					
		(L3)	Cerebrovascular disorde	rs					
		(L4)	Movement disorders						
		(L5)	Dementia						
		(L6)	Intensive care neurology	/					
		(L7)	Demyelinating disorders	;					
		(L8)	Comma and brain death						
		(L9)	Headache and cranial ne	euralgias					
	(L10) Epilepsy and paroxysmal consciousness disorders								
	(L11) Central nervous system tumors								
		(L12) Neuromuscular disorde	ers					
	Seminars (S)	(S1)	Case history of neurolog	ical patient					
		(S2)	Examination of neurolog	gical patient - Cra	nial nerves				

					(S	(S3) Examination of neurological patient - Motor system							
					(S	54)	Examination of n	eurological pa	itient - Sensory	systen	า		
					(S	55)	Cerebrovascular	disorders - cli	nical picture	-			
					(S	66)	Ultrasound of the	e head and ne	ck blood vessels	S			
					(S	57)	Movement disor	ders - clinical	picture				
					(S	58)	Pain and pain syr	ndromes. Low	back pain.				
					(S	59)	Clinical picture o	f patient with	dementia				
					(S	510) Brain stem sync	romes. Vertig	0.				
					(S	511) Spinal disorders	5					
					(S	(S12) Genetics of neurological diseases							
					(S	(S13) Treatment of multiple sclerosis							
					(S	(S14) Diagnosis of cerebrospinal fluid							
					(S	515) Autonomic nerv	ous system di	isorders - select	ed top	oics		
					(S	516) Emergency neu	rology					
					(S	517) Localisation in c	linical neurolo	ogy				
					(S	518) Epilepsy - clinica	al picture					
					(S	519) Electroencepha	lography					
					(S	520) Paraneoplastic	neurologic syr	ndromes				
					(S	521) Electromyoneu	rography					
					(S	522) CNS infections						
					(S	523) My hardest clin	ical case					
		Exercis	ses (E)		(E	1)	History and exan	nination					
					(E	2)	Motor system						
					(E	3)	Sensation						
					(E	4)	Cranial nerve I: C	Olfactory nerve	2				
					(E	(E5) Cranial nerves II, III, IV, VI: Eye							
					(E	(E6) Cranial nerves V and VII: The face							
					(E	7)	Cranial nerve VII	l: Auditory nei	rve				
					(E	8)	Cranial nerves IX	, X, XII: The m	outh				
					(E	9)	Cranial nerve XI:	Accessory ner	ve				
					(E	10) Diagnostic metl	nods in neurol	ogy: EMNG pra	cticals			
					(E	(E11) Diagnostic methods in neurology: Ultrasound of the head and neck							
					Ve	vessels							
					(E	(E12) Diagnostic methods in neurology: EEG practicals							
					(E	(E13) Gait							
					(E	(E14) Coordination							
					(E	(E15) The autonomic nervous system							
					(E	(E16) Speech							
					(E	(E17) Mental state, higher function							
					(E	18) Objective tests	for evaluation	of neurological	defici	t		
					(E	19) Summary of sta	ndard neurol	ogical examinati	on			
					(E	20) Preliminary exa	mination – pr	actical exam				
Language		Englisł	h										
E-learning		Classe	s are c	onduc	ted in pers	son	(live). If necessa	ary, lectures a	and seminars ca	an be	combir	ned (live and	
		online) or cor	nplete	ely online vi	a e	-learning platfor	ms (Google M	eet) up to 20 %	max.			
Teaching		Teachi	ing, inte	eractiv	e and activ	e-e	experiential.						
methods													
					Types	of	assessment (ind	icate – Bold)					
		Ty	ype of p	ore-ex	amination o	obli	gation	.1	1	ype of	exam		
midterm	semir	har e	ssay/re	port	practic	:al/	project task	other	written	or	al	practical	
	pape	er				_f -	CTC anadite and	hara in the	exam	exa	Im	exam	
Church	nt obli	gations	-		Allocation (share in the gr	aue Share in EC	тс	Cha	ro in grada	
Stude		gations	>	0.11	come code		Hours of W	UKIUdu	Share in EC	13	5112	ire in grade	
Atto	nding	lasses		out	come coue		00		2				
Pro-ovar	n/Pract	Sciasses 90 3 petical oxam III. MEMSE801-4 20 0.67 22.22%						33 33%					
rie-exdi	II FI dU	ucai ex	cal exam IU- MFMSE8 IU- MFMSE8				20		0,07			0/ دد,دد	

		IU- MFMSE801-6										
		IU- M	FMSE8	01-7								
Pre-exam/	Written exam	IU- M	FMSE8	01-1		30		1			33,339	%
		10- IVI 11 I- M	FIVISEO	01-2								
		IU- M	FMSE8	01-4								
		IU- M	FMSE8	01-5								
		IU- M	FMSE8	01-6								
		IU- M	IU- MFMSE801-7									
		IU- M	FMSE8	01-8								
Ser	ninars	ars IU- MFN				10		0,3	3			
		FMSE8	01-5									
	IU- N		FIVISEO	01-0								
Oral (fi	Oral (final) exam		FMSE8	01-1		30		1			22 229	%
		IU- M	FMSE8	01-2		50		-			55,557	0
		IU- M	FMSE8	01-3								
		IU- M	FMSE8	01-4								
		IU- M	FMSE8	01-5								
		IU- M	FINISE8	01-6								
		10- M	FIVISEO	01-7								
	In total		010		180		6					
	In total			ethod c	of calculati	ng the fin	al grade					
The final grad	e is calculated as	the arit	hmetic	: mean d	of the grad	les obtain	ed on th	ne practical, w	ritten a	and oral	parts of	the
exam, that is:	(Written+Practica	al+Oral)	/3.		-						-	
Literature	Title		Ed	ition	Language			Тур		literatur	e	
(indicate)	(title, author, y	vear)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Simon RP, Amino	off MJ,		х		Х			Х			
	Greenberg DA. C	linical										
	Neurology. 10th											
	Edition. New Yor	k:										
	Lange Medical											
	Books/McGraw H	Hill,										
	2018.											
Additional	Mattle H.			Х		Х			х			
	Mumenthaler M	•										
	Fundamentals of	F										
	Neurology, An											
	illustrated Guide	,										
	Second edition.											
	Thieme, 2017.											
	Adams AC. Mayo	Clinic		х		X			Х			
	Essential Neurol	ogy.										
	Rochester (Zha											
	Equidation for											
	Modical Educatio	on and										
	Research 2017	ni allu										
	Fuller G. Neurolo	ogical		x		x			x			
	Examination Ma	de										
	Easy, Sixth Editio	n.										
	Elsevier, 2019.											
Additional co	urse information							l				I
Lectures	ectures											

All students are required to attend lectures regularly (as prescribed by the teaching regulations), and records will be kept about them. All students who are absent from the same are obliged to pass the colloquium from the missed part of the material, as a prerequisite for taking the exam. All students are obliged to respect the schedule and space, come to lectures properly prepared and inform the teacher or head of the department if there are any ambiguities. **Exercises**

All students are required to attend exercises (as prescribed by the rules of faculty), and records will be kept. All students who miss some of the exercises will be required to pass the colloquium from the missing part of the material. All students are required to attend the exercises properly dressed (white coat, appropriate clothing and footwear) on time and in accordance with the schedule and agreement with the assistant who is in charge of exercises. **Seminars**

All students are required to attend seminars regularly (as prescribed by the teaching regulations), and records will be kept about them. All students who miss some of the seminars will be required to pass the colloquium from the missing part of the material.

Practical, written and oral exam

Preliminary / practical exam (examination of the neurological patient) will be held on the last day of the Course and it is a prerequisite for approaching to written and oral exams.

The written exam contains 50 questions, which cover all areas covered by the curriculum. To pass the exam (grade sufficient), the student must answer 55% of the questions correctly, i.e. must obtain at least 28 points.

According to the Rulebook on studying at the University of Mostar, grades are assigned as follows:

0-54% - insufficient (1); 55-66% - sufficient (2); 67-78% - good (3); 79-90% - very good (4); 91-100% - excellent (5).

The condition for taking the oral exam is that the student has passed practical and written exams.

The winter and summer exam periods are organized by mutual agreement of the teachers, student representatives and the service for the organization of classes, about which students will be informed in a timely manner.

The final grade is calculated as the arithmetic mean of the grades obtained on the practical, written and oral parts of the exam, that is: (Written+Practical+Oral)/3.

MEDICAL STUDIES IN ENGL	MEDICAL STUDIES IN ENGLISH							
	T							
INTEGRATED	Type	UNIVERSITY						
-	Module	-						
4	Semester	VIII						
DERMATOVENEROLOGY	Course code	MFMSE802						
5	Status	OBLIGATORY						
Teaching hours		Lectures	Exercises	Seminars	Practice			
I		30	25	15	0			
 to provide studen to train students systemic treatme and outpatient pa to train students autoimmune, on membranes and s 	 to train students to conduct dermatological clinical examination, as well as to aplly local and systemic treatment and to conduct physical treatment procedures in daily practice with hospital and outpatient patients, to train students to be able to understand the conditions that lead to inflammatory, infectious, autoimmune, oncological and sexually transmitted diseases of the skin, visible mucous membranes and skin appendages. 							
Learning outcome (LO)				Course learning	LO code at			
Student: outcome code the study program level								
Describes and explains the the skin.	e basic anat	omical and function	onal features of	IU-MFMSE802- 01	IU-MSE1 IU-MSE2			
Describes and explains t (eflorescences) on th dermatovenerological pr dermatological diagnostic	Describes and explains the basic functional features of skin lesions IU-MFMSE802- (eflorescences) on the skin, interprets the methods of dermatovenerological propaedeutics and the basic principles of IU-MSE6 (U-MSE6) IU-MSE6 IU-MSE20							
Performs complete histo examination of the derma information in establish treatment options.	ory taking Itological pa ing a wor	(anamnesis) and tient and integrate king diagnosis an	basic clinical es the obtained nd considering	IU-MFMSE802- 03	IU-MSE14 IU-MSE15			
Describes various causes allergic, genetic, autoimm the mechanism of their eff	of dermatov une, degene ect on the s	venerological disea rative, oncological kin and skin functio	uses (infectious,) and interprets ons.	IU-MFMSE802- 04	IU-MSE5			
Integrates and applies kno features of dermatologica diagnostic thinking and co	wledge abo l and venere nclusions.	ut clinical, laborato eal diseases, as we	ory and imaging II as differential	IU-MFMSE802- 05	IU-MSE8			
	1 1 1							
In accordance with the Rul	ebook on th	e Integrated Studie	s at the School of	Medicine Univers	sity of Mostar.			
Week / shift	Topic		6.11					
Lectures:	onorrhoea, Ulcu HPV, Nongonor Rosacea	s molle, LG, rheic genital						
	MEDICAL STUDIES IN ENGL INTEGRATED - 4 DERMATOVENEROLOGY 5 Teaching hours - to provide student - to train students systemic treatme and outpatient pa - to train students autoimmune, on membranes and ss Learning outcome (LO) Student: Describes and explains the the skin. Describes and explains the the skin. Describes and explains t (eflorescences) on the dermatological diagnostic Performs complete historexamination of the derman information in establish treatment options. Describes various causes allergic, genetic, autoimment the mechanism of their effe Integrates and applies known features of dermatological diagnostic thinking and counce In accordance with the Rul Week / shift Lectures:	MEDICAL STUDIES IN ENGLISH INTEGRATED INTEGRATED A Module A Semester DERMATOVENEROLOGY Course code 5 Status Teaching hours - to provide students with the l - to train students to conduct systemic treatment and to co and outpatient patients, - to train students to be able t autoimmune, oncological ai membranes and skin appenda Learning outcome (LO) Student: Describes and explains the basic anat the skin. Describes and explains the basic fu (eflorescences) on the skin, dermatovenerological propaedeutics dermatological diagnostic procedures Performs complete history taking examination of the dermatological pa information in establishing a wor treatment options. Describes various causes of dermatov allergic, genetic, autoimmune, degene the mechanism of their effect on the s Integrates and applies knowledge abo features of dermatological and venere diagnostic thinking and conclusions. In accordance with the Rulebook on th Week / shift Veek / shift Lectures: (L1) Str (L2) Pri (L3) Pri (L1) Str (L1) Str (L1) Pri (L1) Str (L1)	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 4 Semester VIII DERMATOVENEROLOGY Course MFMSE802 code Status OBLIGATORY Teaching hours Lectures 30 - to provide students with the basic knowledge of - - to train students to conduct dermatological cli systemic treatment and to conduct physical treat and outpatient patients, - - to train students to be able to understand the or autoimmune, oncological and sexually trans membranes and skin appendages. - Learning outcome (LO) Student: - - Describes and explains the basic functional features (eflorescences) on the skin, interprets the dermatological diagnostic procedures and therapy. - Performs complete history taking (anamesis) and examination of the dermatological patient and integrate information in establishing a working diagnosis at treatment options. - Describes various causes of dermatovenerological diseases, as we diagnostic thinking and conclusions. - Describes various causes of dermatovenerological diseases, as we diagnostic thinking and conclusions. - In accordance with the Rulebook on the Integrated Studie -	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 4 Semester VIII DERMATOVENEROLOGY Code Image: Code 5 Status OBLIGATORY Teaching hours Lectures Exercises 30 25 - to provide students with the basic knowledge of dermatovenerodures and outpatient patients, - to train students to be able to understand the conditions that lead autoimmune, oncological and sexually transmitted diseases membranes and skin appendages. Learning outcome (LO) Student: Describes and explains the basic functional features of skin lesions (efforescences) on the skin, interprets the methods of dermatovenerological propaedeutics and the basic principles of dermatovenerological patient and integrates the obtained information in establishing a working diagnosis and considering treatment options. Describes various causes of dermatovenerological diseases (infectious, allergic, genetic, autoimmune, degenerative, oncological) and interprets the mechanism of their effect on the skin and skin functions. Integrates and applies knowledge about clinical, laboratory and imaging features of dermatological and venereal diseases, as well as differential diagnostic thinking and conclusions. In accordance with the Rulebook on the Integrated Studies at the School of theak	MEDICAL STUDIES IN ENGLISH INTEGRATED Type UNIVERSITY - Module - 4 Semester VIII DERMATOVENEROLOGY Course code MFMSE802 5 Status OBLIGATORY Teaching hours 1 Lectures Exercises Seminars 30 25 15 - to provide students with the basic knowledge of dermatovenerology, - - to train students to conduct dermatological clinical examination, as well as to a systemic treatment and to conduct physical treatment procedures in daily practice and outpatient patients, - to train students to be able to understand the conditions that lead to inflammato autoimmune, oncological and sexually transmitted diseases of the skin, vir membranes and skin appendages. Course learning outcome code Learning outcome (LO) Course learning outcome code IU-MFMSE802- 01 Student: Course learning outcome code 10 Describes and explains the basic functional features of skin lesions information in establishing a working (anamnesis) and basic clinical examination of the dermatological patient and integrates the obtained information in establishing a working diagnosis and considering treatment options. 10 Describes various causes of dermatovenerological diseases (i			

	(115) Chronic venous disorders
	(LIS) Enrolle vertous disorders
	(LIO) Disoluers of pigmentation
	(L18) Papulosquamous dermatoses
	(L19) Psoriasis
	(L20) Parapsoriasis
	(L21) Erythrodermas
	(L22) Dermatologic oncology (BCC, SCC)
	(L23) Dermatologic oncology (Melanoma, Lymphoma)
	(L24) Benign skin tumors
	(L25) Bacterial infection of skin and mucosa
	(L27) Viral infections of skin and mucosa
	(L28) Dermatomycoses
	(L29) Parasitic disorders
	(130) Most common allergic diseases in dermatology
Seminars:	(S1) Approach to patients with different type of lesions
Seminars.	(S1) Approach to patients with different type of resions (S2) Inhoritod connective ticsue diseases
	(S2) Morphas (coloredermis circumscripts) and sutaneous espects of
	(SS) Morphea (scieroderinia circuitiscripta) and cutaneous aspects of
	systemic scierosis
	(S4) Pseudoscierodermas
	(S5) Lupus erythematosus
	(S6) Dermatomyositis
	(S7) Hair disorders
	(S8) Nail disorders
	(S9) Atopic dermatitis
	(S10) Urticaria
	(S11) In vivo and in vitro tests in diagnosis of allergic diseases
	(S12) Case-based approach to patients with facial dermatoses
	(S13) Case-based approach to patients with blisters
	(S14) Case-based approach to patients with papulosquamous dermatoses
	(S15) Case-based approach to patients with sexually transmitted disorders
Exercises:	(F1) Dermatological propaedeutics
	(F2) Taking history in dermatological natients
	(E2) Dermatological status
	(E4) Approach to the patient with acre
	(E4) Approach to the patient with respect
	(ES) Approach to the patient with regrises
	(EO) Approach to the patient with psoriasis
	(E7) Basic principles of local and systemic dermatological therapy.
	(E8) Approach to the patient with lupus erythematosus
	(E9) Approach to the patient with pigmented skin lesions
	(E10) Dermatoscopy
	(E11) Approach to the patient with epidermal skin tumors (BCC, SCC).
	(E12) Native mycological preparations. Wood's lamp.
	(E13) Approach to the patient with infectious skin diseases
	(E14) Cryotherapy – application of liquid nitrogen in dermatology.
	(E15) Small procedures in dermatology: excochleation,
	electrocauterization.
	(E16) Phototherapy.
	(E17) PUVA – therapy.
	(E18) Allergological diagnostics, types of tests.
	(E19) Intradermal, prick, scarification.
	(E20) Epicutaneous test (Patch).
	(E21) Approach to the patient with sexually transmitted disease – history
	taking.
	(F22) Approach to the patient with sevually transmitted disease
	(122) Approach to the patient with sexually transmitted disease –
	(E22) Approach to the potient with least least
	(E23) Approach to the patient with leg uters.
	נבצא) Diagnostic and therapeutic guidelines for the most common
	dermatoses in childhood.

		(E25) Specificities of diagnostic and therapeutic procedures in pregnancy dermatoses													
E-learning		Classes	s are con	ducted	live. I	f neces	sary, lect	ures and	seminat)	ars can be c	ombin	ed (live a	nd onli	ne) or	
Teaching		Teachi	ng, intera	ctive ar	nd activ	ve (with	patients	and in la	b).	5 max 2070.					
methods					Туре	es of ass	essment	(indicate	- Bold)						
		Ту	ype of pre	-exami	nation	obligat	ion				Тур	e of exam	l		
midterm	sem paj	inar oer	essay/re	port	pra	ctical/pi	roject tasl	c i	other	written exam	0	ral exam	prac	ctical	
		<u> </u>		Allo	cation	of ECTS	6 credits a	nd share	in the g	grade	1		1		
Student obligations				Learning outcome			Hou	Hours of workload			Share in ECTS			Share in grade	
Atte	ending	classes	s					70		2.3	3				
Se	minar	paper						10		0.3	3				
Pre-exa	am/Wr	itten e	xam	IU- N IU- N	/FMSE8 /FMSE8	802-01 802-02		30		1.0)		50%		
Pre-exa	m/Fina	al oral e	exam	IU- N IU- N	/FMSE8 /FMSE8	802-03 802-04		40		1.3	4		50%		
				IU- N	/FMSE8	802-05		150		-			1000/		
		I	n total		Mot	hod of a		150 the fina	Igrado	5			100%		
The final gr	ade is	calcula	ted as the	arithm	netic m	liou of t	the grade	s obtaine	ngraue	e written an	d oral e	exam that	is (W-	-0)/2	
Literature		calcula	Title	. arrann	Edi	ition		Lan	guage			Type of lit	terature	2	
(indicate)		(title, a	author, ye	ar)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsor	y Šit	um M,	Goren A.			х		х			х				
	De	rmatov	enereolog	gy,											
	tex	tbook	and atlas.												
	Me	edicinsk	ka naklada	1											
	Zag	greb, 20	021 Data N. Cl												
Additional	inf	onic A, I	DOSS N. SI	kin vr		х		х			х				
	Fac	rulty of	⁻ Medicine) _											
	Un	iversity	of Saraje	vo,											
	20	, 19. [,]													
Additional	course	inform	nation												
The Derma	tovene	erology	course co	onsists	of 70 h	nours di	vided into	15 teac	hing un	its, and is cor	nducte	d during a	pproxir	nately	
2 to 3 week	ks. Eac	h unit c	consists of	f 1-2 ho	ours of	lecture	s, 1 hour (of semina	ar to ch	eck and dete	rmine l	knowledge	e and 2	hours	
of exercise	s with	assista	ants for p	ractical	appli	cation c	of acquire	d knowle	edge th	rough patier	it exan	ninations	in outp	atient	
in advance	throug	h the r	renaratio	n of a s	emina	r naner	in teams	of 3-5 st	s the th udents	depending o	or white on the r	umber of	studen	ts and	
the intende	ed topi	cs of th	ne semina	r). in th	e form	of a str	ructured F	overPoi	nt pres	entation.	in the r		Studen	to und	
The writter	n exam	n is per	rformed e	arly aft	ter the	derma	tovenero	ogy cou	rse. It c	onsists of 50) test-c	uestions	with m	ultiple	
choice of a	nswers	s (one c	of the five	offered	d answ	ers is al	ways corr	ect). To	pass the	e exam (grad	e suffic	ient), the	studen	t must	
answer 55%	6 of th	e quest	tions corre	ectly, i.e	e. mus	t obtain	at least 2	8 points							
According t	o the l	Rulebo	ok on stud	dying at	the U	niversit	y of Most	ar, grade	s are as	signed as fol	lows:				
0-54% insut	fficient	t (1);													
67-78% goo	ncient	(2);													
79-90% (ve		od 4):													
91-100% ex	91-100% excellent (5).														
The oral ex	The oral exam includes the most important, integrative units of dermatovenerology. Through 4 questions, integrative														
knowledge	is test	ed, wh	ich is esse	ential fo	or unde	erstandi	ng the en	tire subj	ect and	is the basis f	or goo	d medical	practic	e. The	
condition fo	or taki	ng the	oral exam	is that	the st	udent p	participate	ed in the	prepara	ation of the s	emina	r paper an	id passe	ed the	
written exa	written exam. The final grade is calculated as the arithmetic mean of the grades obtained on the written and eral examption that is: $(W, O)/2$														
i në margr	aueis	caiculd	ieu as the	: מו ונו וו	ieuc ff		ine graue	SUDIGINE	מ טוו נח	e written and		nam, tiidt	15. (774	0//2.	

Study	MEDICAL STUDIES IN	I ENGLISH											
programme													
Cycle	INTEGRATED	Туре	UNIVERSITY										
Study track	-	Module	-										
Year of study	4	Semester	VIII										
Course title		Course code	MEMSE803										
course thic	AND INTENSIVE												
	MEDICINE												
FCTS	45	Status	OBLIGATORY										
2010	Teaching hours	514145	Lectures	Evercises	Seminars	Practice							
	reaching nours		20	40	0	0							
			20	40	0	0							
Course	Course objectives are	2:											
objectives	To provide students	with theoretic	cal and practical knowle	edge about region	al and general a	nesthesia and							
	resuscitation of critic	ally ill nationt			ai ana generai a	nestresia, and							
	Learning outcome (L	0)			Course	LO code at							
Course learning	Student:	-,			learning	the study							
outcomes					outcome	program level							
					code	1.0.							
	Applies valuable kno	wledge and sl	kills in diagnosis and tre	eatment of	IU-MFMSE803-	IU-MSE10							
	patients in need of e	mergent resu	scitation (airway, breat	hing, and	1								
	circulation)	0		0,									
	Describes and recog	nizes the signs	s of sudden cardiac arre	est, provides the	IU-MFMSE803-	IU-MSE1							
	basic and advanced	measures of	f cardiopulmonary res	uscitation (CPR)	2	IU-MSE4							
	according to curren	t guidelines a	and applies practical s	kills on medical		IU-MSE5							
	simulation mannequ	ins (start IVs, i	(start IVs, intubation techniques, nasogastric tube										
	insertion, urethral ca	atheterization	etc.)	-									
	Explains the anatom	y of airway, co	of airway, confidently secures airway and has a IU-MFMSE803- IU-MSE2										
	knowledge of maneu	overs and equi	ipment necessary for a	dvanced airway	3	IU-MSE10							
	management												
	Explains basic princip	oles and techr	niques of general and re	egional	IU-MFMSE803-	IU-MSE1							
	anesthesia, including	g risks and ber	nefits of various technic	ques and	4	IU-MSE3							
	distinguishes betwee	en methods of	f anesthesia as clearly a	s its effects on		IU-MSE11							
	underlying physiolog	gy and underge	oing surgery procedure										
	Classifies the specific	c agents used	for induction and main	tenance of	IU-MFMSE803-	IU-MSE11							
	anestnesia and analy	/zes their adva	antages and disadvanta	ges (IV agents,	5	IU-MSE15							
		ileuromuscula											
	Shows and explains	monitoring teo	chniques both non-inva	asive (ECG, BP,	IU-MFMSE803-	IU-MSE8							
	Pulse Oximetry) and	invasive			6	IU-MSE10							
	Shows critical thinkin	ng in assessme	ent and recognition of o	critically ill	IU-MFMSE803-	IU-MSE6							
	patients including di	fferent types of	of shock and explains m	nanagement of	7	IU-MSE10							
	critical patient in out	tpatient and h	ospital settings										
Prerequisites	In accordance with t	he Rulebook o	on the Integrated Studie	es at the School of	Medicine Unive	rsity of Mostar.							
for the course			0			,							
enrolment													
	Week / shift	Topic											
Course	Week 1	Basic L	ife Support										
content		Algorit	hm of Advanced Life Su	ipport									
		Pediatr	ic Basic Life Support and	d Resuscitation of	Newborn								
		Compli	cations of CPR										
		Post re	suscitation syndrome										
		Brain d	leath										
		Anaphy	ylaxis and other emerge	ency situation in a	nesthesia								
		Anesth	etic Monitoring	-									
		Establi	shing vascular access in	anesthesiology									

		Anesthesiology and ventilator Machine											
					Intrave	nous Anes	thetics						
					Other r	harmacol	ngical age	nts in ar	esthesiology				
					Familia	rization wi	th the typ	es of sh	ock and thera	vq			
					Region	al Anesthe	sia and Pa	ain		- 1			
Language	Englis	n			-0								
E-learning	Classe	s are	e conduc	cted liv	e. If ne	cessary, le	ctures ar	nd semir	hars can be h	neld co	ombined	(live an	d
Teaching	Teach	ing i	nteractiv	ery onni ve active		ntial	lationns (Google-	weet) up to n	Idx 20	70.		
methods	reach	ing, i	nteractiv		experie	inciai.							
			Turne of		Types of	f assessme	nt (indica	te - Bold)		Tuno of		
			rype or j c	bligatic	ninatio	n					exam		
midterm	seminar paper	ess	ay/repor	t	practica	al/project task other			written ex	am c	am oral exam		ctical
	Allocation of ECTS credits and share in												
Student obligations Learning Hours of workload Share in FCTS Share in grade												grade	
	outcom												5
Class atte enga	endance an gement	dance and ement					60		2			0%	
Pre-exam/	Practical ex	kam	IU-M	FMSE80	3-3		15		0.	5		0%	
			IU-M	FMSE80	3-4								
Pre-exam/W	e-exam/Written exam IU-MFMSE803-1						30		1			50%	
IU-MFI					3-2								
	IU-MFMSE803-5												
Pre-exam/O	ral exam		IU-M	FMSE80	3-3		30		1			50%	
			IU-M	FMSE80	3-4 3-6								
			IU-M	FMSE80	3-0								
	Ir	ı tota	1				135		4.	5		100%	,)
					M	ethod of calculating the final grade							
Practical par	t of exam i	s pre	conditio	n for w	ritten ar	nd oral par	t of exam	The fin	al grade is the	avera	ge of the	written	and oral
exam grades	. According	g to t	he Ruleb	ook on	Studving	g final grad	e is obtair	ed as fo	llows:	avera	Be of the	Whiteen	
A = 91-100%	5				, (5 0							
B = 79 to 90%	64												
C = 67 to 789	63												
D = 55 to 669	% 2												
F = 0 to 54%	1			E d	:+:		Lan				Tuna af		
Literature (indicate)	(Title	auth	or	Ed	Ition	creation	Lan	guage	multilingual	book	Type of	literatu	re
(indicate)	y	ear)	101,	OWIT	other	croatian	english	other	munniguai	DOOK	article	script	other
Compulsory	Morgan	& Mil	khail's		х		х			х			
	Clinical												
	Iohn F B		gy, 7e sworth										
	IV, David	C. M	lackey,										
	John D. V	ohn D. Wasnick											
Additional	Clinical A	nest	hesia,		x		x			x			
	8e by Pa	ul G.	Barash										
	(Author),	Micl	hael K.										
	Cahalan	MD											
	(Author),	Bruc	ce F.										
	Cullen M	υ (Αι	uthor)										

	Textbook of Critical		х		х			х			
	Care										
	English edition by										
	Jean-Louis Vincent										
	MD PhD, Frederick										
	A. Moore MD										
MCCM											
Additional course information											
Students are obliged to regularly attend and actively participate in all forms of classes.											
The exam in	Anesthesiology and Inte	ensive n	nedicine	is taken af	ter the cl	ass and	consists of a w	ritten,	practical	(patien	t
examination	with interpretation) an	d oral p	art.								
The written a	and practical exam in Ar	nesthesi	ology an	d Intensiv	e medicin	e is mar	ndatory and qu	ualifyin	g for the	oral exa	m.
To pass the e	exam (grade sufficient),	the stud	dent mu	st answer !	55% of th	e questi	ons correctly.				
The practical	exam consists of patie	nt exam	ination a	and applyii	ng knowle	edge for	anesthesia in	duction	and airv	vay	
management.											
The oral part of the exam consists of four different areas: 1. practical anesthesiology (airway management, iv access,											
basic monitoring), 2. Intensive medicine (recognition and management of shock), 3. CPR algorithm (applying BLS and											
ALS), 4. Type	of anesthesia (agents e	explaine	d and us	ed in anes	thesiolog	y).					
The final grade is the average of the written and oral exam grades											

Study	MEDICAL STUDIES I	N ENGLISH							
programme		-							
Cycle	INTEGRATED	Туре	UNIVERSITY						
Study track	-	Module	-						
Year of study	4	Semester	VIII						
Course title	INFECTOLOGY	Course	MFMSE804						
		code							
FCTS	8	Status	OBLIGATORY						
Teaching hours	0	514145	Lectures Exercises	Seminars	Practice				
reaching nours			20 65	35	-				
Course objectives Course learning outcomes	- to achieve students' understanding of the clinical, diagnostic and epidemiological features of the triportant infectious diseases; - to train students to recognize general and special symptoms of infectious diseases and differential diagnostic reasoning; - to expand students' knowledge about critical assessment of laboratory and microbiological finding rational treatment; - to train students about collecting and transporting of biological samples for microbiological analys: - to achieve students' understanding of the measures for preventing infectious diseases, as well as importance of protecting medical workers from infection. Learning outcome (LO) Course learning outcome (LO) Student: IU-MSE4 Describes and explains the conditions of occurrence and characteristics of infectious diseases. IU-MSE4 Analyzes and classifies the etiology of infectious diseases of different organ systems. IU-MSE4 Presents and explains the diagnostic and therapeutic approach in the treatment of infectious diseases. IU-MSE6 Presents and explains the diagnostic and therapeutic approach in the treatment of infectious diseases. IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 Presents and explains the principles of antimicrobial stewardship. IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6 IU-MSE6								
	Lists and classifies recommends a the Explains infectious (chemoprophylaxis	s emergency rapeutic app disease prev and immun	y conditions in infectious diseases and proach. vention measures: general and special oprophylaxis).	IU- MFMSE804-5 IU- MFMSE804-6	IU-MSE8 IU-MSE10 IU-MSE11				
	Understands and e vaccination.	mphasizes th	he significance and importance of	IU- MFMSE804-7	IU-MSE10 IU-MSE11				
	Presents and interp microbiological dia	prets the app gnostics.	olicability of different methods of	IU- MFMSE804-8	IU-MSE10				
	Emphasizes and dif of collecting and tra analysis.	ferentiates k ansporting b	basic terms related to the type, method biological samples for microbiological	IU- MFMSE804-9	IU-MSE5				
Prerequisites for the course enrolment	In accordance with	the Ruleboo	k on the Integrated Studies at the School of	Medicine Unive	ersity of Mostar.				
Smonnent	Week / shift	Т	opic						
Course content	1 st week	In	itroduction and general infectology						

					Sym Stre Ton Acu Pne COV	Symptomatic treatment Streptococcal and staphylococcal infections Tonsillopharyngitis Acute respiratory infections Pneumonia COVID-19								
	-	and .	woold		Cas	e report	tions							
		2V	меек		Gas	trointestinal infection	ns							
					Cen	tral nervous syste	em infections							
					Sep	sis								
					Ente	eroviral infections	;							
					Her	pesviral infection	5							
					Exat	thematous diseas	es							
					Skin	and soft tissues	infections							
	-	2rd y	wook		Case	Case report								
		Siu	WEEK		700	letanus and botulism								
					Sna	Snake and black widow spider bite								
					Vira	Viral hepatitis								
					HIV,	HIV/AIDS								
					Para	Parasitic diseases								
	-	4th	voole		Casi	Case report								
	4 WEEK					Immunization / vaccination Principles onf antimicrobial thorapy								
						Hospital-aquired infections								
					Prin	ciples of diagnost	ic of infectiou	ıs diseases						
A					Арр	licability of differ	ent methods o	of microbiologica	al diagr	ostics and	critical			
-		judgment of microbiological findings												
Language		Engl	ish	اما اندم	16		inere een he l			م م م م م م ا				
E-learning		com	ses are ne	ling th	. If necessary,	, lectures and sen	inars can be i	neid in combinat	ton (IIV	e and onlir	ie) or			
		com	pietery of	inne ti			bogie wieet) u	ip to max 20%.						
Teaching		Lect	ure, intera	active	and active ex	periential.								
methods					Turana af		ente Deld							
			Type of n	re-eva	Types of mination obl	assessment (indi	cate - Bold)	Т	une of e	yam				
midterm	semi	nar	essav/re	eport	practical	/project task	other	written	oral	pra	ctical			
	рар	er	// -		P			exam	exan	n i i				
				A	Allocation of E	CTS credits and s	hare in the gr	ade						
Stude	ent obl	igatic	ons	l	earning	Hours of w	orkload	Share in ECT	rs	Share in	grade			
Class	attend	ance	and	out	come code									
engag	emen	t in cl	ass			120		4		0%				
Midter	n/Coll	oquiu	um in	IU-MI	FMSE804-1	20		1		00/				
gene	ral infe	ectolo	ogy	IU-MI	FMSE804-2	30		1		0%				
Pre-exa	n/Prad	tical	exam	IU-MI	MSE804-5	30		1		30%	/ 0			
				IU-MI	-IVISE804-9 FMSE804-3									
IU-MFM				IU-MI	FMSE804-4									
IU-MFMSE					MSE804-5									
Pre-exam/Oral exam IU-MFMSE				-MSE804-6	60		2		70%	ð				
IU-MFMSE804				FMSE804-8										
				IU-M	FMSE804-9									
	In total					240 8 100%				%				
- The cond	tion fo	or tak	ing the pr	actical	Method	of calculating the	tinal grade	m in general inf	octoloc	N				
		n laƙ	ing the pr	acticdl	and Oral part	cor the examis po	assing the exd	in in general into	eccolog	y.				

- The exam in general infectology consists of a test of 30 questions, and the student is obliged to explain the conditions of occurrence and characteristics of infectious diseases and to classify the etiology of infectious diseases.

- The final grade is obtained as a weighted arithmetic mean of the grades obtained from the practical and oral exam $(P\times0,3+O\times0,7)/2$.

According to the Rulebook on Studying at the University of Mostar grades are assigned as follows:

0-54% insufficient (1);

55-66% sufficient (2);

67-78% good (3);

79-90% (very good 4);

91-100% excellent (5).											
Literature	Title	Edi	tion		Lan	guage			Type of l	iteratur	e
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Southwick F. Infectious		х		х			х			
	diseases: a clinical										
	edition McGraw – Hill										
	2020.										
Additional	Wright W. Essentials of		х		х			х			
	clinical infectious										
	diseases. 2nd edition,										
	demosMEDICAL, 2018.										
	Mertz D, Smaill F,		х		х			х			
	Daneman N. Evidence-										
	based infectious										
	diseases. 3rd edition,										
	Wiley Blackwell, 2018.										
	Cho J. Infectious		х		x			х			
	diseases. Case study										
	approach, McGraw-										
	HIII, 2020.										
	iviedical microbiology.	х		х	x					x	
	Laboratory manual for										
	medical students,										
	Jakovac S et al,										
	FIESSUIII, ZUZZ.			I	I		l				

Additional course information

- Students are obliged to regularly attend and actively participate in all forms of classes.

- The exam in Infectology with clinical microbiology is held after the course and consists of a practical (clinical examination of a patient with interpretation) and an oral part.

- The oral part of the exam consists of four different chapters:

1. Bacterial diseases,

2. Viral diseases,

3. Zoonoses,

4. Other important syndromes and entities in infectology (cards with four groups of exam questions).

- The final grade is obtained as a weighted arithmetic mean of the grades obtained from the practical and oral exam (P×0,3+O×0,7)/2.

Study programme	MEDICAL STUDIES	N ENGLISH									
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module									
Year of study	4	Semester	VIII								
Course title	CLINICAL BIOCHEMISTRY	Course code	MFMSE805								
ECTS	1.5	Status	OBLIGATORY								
	Teaching hours		Lectures	Exercises	Seminars	Practice					
			10	5	15	-					
Course objectives	 To achieve studer reflected in the nor organism. To achieve studer To achieve studer biomolecules: horn To achieve studer systems. 	nts' understan mal function nts' understan nts' understan nones, tumor nts' understan	ding of the functioning of the of the organs as well as in the ding of the role of natural bio ding of the dynamics of synth markers, vitamins, trace elem ding of the influence of horma	e organism at t e pathological omolecules in t hesis and degra nents. nones on the fu	he molecular l biochemical pr he body. adation of natu inction of the l	evel, which is rocesses in the ural main organ					
Course learning	Learning outcome Student:	outcome (LO) Course LO code at the learning study program outcome level									
outcomes	Interprets results o	f laboratory a	nalyzes in various diseases.	ו ז	U- MFMSE805-1	IU-MSE8					
	Describes genetic, disease and disease	developmen e mechanisms	tal, degenerative and toxic	causes of I	U- //FMSE805-2	IU-MSE5					
	Describes and exp interpretation of fa	Describes and explains interferences in laboratory analyzes and in IU- IU-MSE15 interpretation of falsely increased/decreased results MFMSE805-3									
Prerequisites for the course enrolment	In accordance with	the Rulebook	on the Integrated Studies at t	the School of N	1edicine Unive	rsity of Mostar.					
chronnent	Week / shift	Тор	ic								
Course content		(L1)	Electrolytes and body fluids								
	Lectures:	(L2)	Acid-base balance								
		(L3)	Trace elements								
		(L4)	Molecular genetics and diagr	nosis of heredi	tary disease						
		(L5)	Laboratory diagnosis of kidne	ney disease							
		(L6)	Laboratory diagnosis of aller	rgies							
		(L7)	Clinical toxicology								
		(L8)	Clinical Biochemistry od diab	betes							
		(L9)	Laboratory diagnosis of cardi	liovascular dise	ase						
	Seminars:	At t will	he seminars, students will so make presentations about se	olve some task eminar topic gi	s about species about species of the	fic topics. They r.					
		(S1)	Clinical diagnosis of thyroid h	hormone and s	steroids hormo	one					
		(S2)	Laboratory diagnosis of kated	ecolamine							
		(S3)	Serum markers of tumor grow	owth							
		(S4)	Laboratory diagnosis of calcin	ium, PTH, Vitar	nine D						
		(S5)	Point-of-care testing								
		(S6)	Laboratory diagnostics of neu	eurological							

						disea	diseases								
	-	Exer	cises:			(E1)	Acquaintar	ice with	the cre	ation of labo	ratory	findings	on aut	omatic	
						analy	zers								
						(E2) I	Determinat	ion of vit	tamin a	nd hormone o	concent	rations	irom bio	logical	
Languago		Engl	ich			samp	les in a me	dical bio	chemica	llaboratory					
Ealiguage		Class	isii ses are ta	ken in r	herson	If nec	essary lect	ures and	semina	rs can take nl	ace com	hined (I	ive and	online)	
L-learning		or co	ompletely	online	via e-l	learnin	g platforms	(Google	Meet) (is to max 20%	6.	ibilieu (i	ive and t	Jinney	
Teaching		Теас	ching, inte	eractive	and a	ctive-e	xperiential.	(
methods			_				-								
					Ту	pes of	assessmen	t (indicat	e - Bold)					
			Type of p	ore-exa	minati	on obli	on obligation			•	Тур	e of exa	m T		
midterm	semir	nar	essay/re	port	pra	ictical/p	ctical/project task other			writter	ו	oral	prac	tical	
	pape	51	Allocation of ECTS credits and share in the grade												
Stude	nt obli	gatio	ons	Le	earning	g	Hour	s of work	load	Share	in ECTS	S	hare in g	grade	
		0		outc	ome c	ode							L.		
Atter	nding c	lasse	es					30		:	1		0%		
9	Semina	ar						5		0	,2		0%		
Pre-exan	n/Writ	ten e	exam	IU- M	FMSE8	05-1		10		0	,3		4000	,	
	IU- MFMSE8					05-2							100%)	
		I	n total					45		1	,5		100%	, D	
	Method of calculating the final grade														
The final grade is a grade from the written exam. A detailed description is provided in additional information about the															
course.			Titla		Ed	ition		Lan	guago			Tuno of	litoratur		
(indicate)	(1	title.	author. v	ear)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	, , Tie	, tz F	· , Jundamet	, als_of	-	x		x			x				
compaisory	Clir	nical	cher	nistry,		^		^			^				
	Fift	h Ed	ition, 200)1											
	Теа	achin	ig materia	als	х			х						х	
Additional	Sci	entif	ic paper	s for		х		х					x		
	ser	ninai	rs, dif	ferent											
Additional		info	rmation										L	<u> </u>	
As it is a bas	sic cou	irse i	n a specif	ic area	of biod	chemist	ry, in addit	ion to th	eoretica	l classes, by p	orocessi	ng selec	ted diffe	rent	
seminar top	oics, th	ie stu	udent furt	her exp	ands l	his knov	wledge and	l can dem	nonstrat	e the ability t	o think	critically	and rec	ognize	
the essentia	al elem	nents	s of a cert	ain edu	cation	al issue	2.								
The course	in clini	ical b	oiochemis	try con	tains 3	0 hour	s and is tak	en during	g one w	eek, which inc	ludes t	he post-	class exa	am	
period (pre	liminai tako tk	ry). T	he course	e consis	is of le	ectures	, seminars	and exer	cises.	obligations	ttand a	laccoc re	aularly		
create and	nreser	ie ex nt a s	eminar e	ssav on	the giv	yen ton	ic do exer	rises in th	nowing he pract	ical part of th	e class	lasses le	guiarry,		
To pass the	prelin	ninar	y/written	exam (grade	sufficie	ent), the stu	udent mu	ist answ	er 55% of the	questic	ons corre	ectly.		
According t	According to the Rulebook on studying at the University of Mostar, grades are assigned as follows:														
0-54% insut	0-54% insufficient (1);														
55-66% SUT	55-00% sufficient (2);														
79-90% (ve	rv gaa	od 4).	:												
91-100% ex	cellen	t (5).	,												
		. ,													
The final gra	ade is ⁻	the r	esult of t	he writt	ten exa	am.									

Study	MEDICAL STUDIES IN	ENGLISH										
Cycle	INTEGRATED	Type	UNIVERSITY									
Study track	-	Module	-									
Year of study	Δ	Semester	VIII									
Course title		Course code										
	FSTCHIATRT	course coue	IVIFIVI3E000									
ECTS	5	Status	OBLIGATORY									
	Teaching hours		Lectures	Exercises	5	Seminars	Practice					
-			40	30		30	0					
Course	- introduction to dete	o determinants of mental health and mental disorders										
objectives	- understanding ment	iental diseases within the biopsychosocial concept										
	- recognition of clinica	I course and di	fferential diagnoses o	f mental disor	rders							
	- getting acquainted w	vith the organiz	ational possibilities o	f mental healt	h care	2						
	- introduction to the c	ptions of treat	ment of mild mental h	nealth disorde	rs							
-	- mastering basic ther	apeutic algorit	nms									
	Learning outcome (LO))			Cour	se learning	LO code at					
Course	Student:				outo	come code	the study					
learning	Mill be able to plan i	ndonondont la	arning through study	ing a way of			program level					
outcomes	critical and self-critica	l questioning o	f scientific truths.	ilig a way ui	10-101	110132800-1	10-101321					
	Demonstrates persor	nal qualities in	ncluding teamwork	skills, active	IU-M	FMSE806-2	IU-MSE9					
	listening and buildir	ng positive rel	ationships with me	mbers of a								
	multidisciplinary and i	ultidisciplinary and interdisciplinary professional team.										
	Understands the ba	Jnderstands the basics of psychiatry, psychiatric diseases and IU-MFMSE806-3 IU-MSE6										
	disorders as well as in	disorders as well as intellectual disabilities.										
	evaluation trough exa	mining patient	s in primary health ca	re.	10-101	110132800-4	10-1013214					
	Is able to utilize diagn	ostic criteria to	arrive at an appropria	ate diagnosis	IU-M	FMSE806-5	IU-MSE8					
	and to develop an app	propriate list of	differential diagnoses	S.								
	Is able to apply appro	opriate psychor	pharmacological and	psychosocial	IU-M	FMSE806-6	IU-MSE15 IU-MSE10					
	Is able to recognize u	urgent psychiat	tric conditions and a	oply therapy	IU-M	FMSE806-7	IU-MSE15					
	accordingly in primary	health care se	tting.				IU-MSE10					
	Is able to recognize p	sychiatric diso	rders that demand co	mplex work	IU-M	FMSE806-8	IU-MSE15					
	up and/or hospital	treatment and	is able to referee	patient to			IU-MSE10					
	appropriate psychiatr	ic unit.				-						
	Analyses application	of therapy to	r complex and chror	nical mental	10-14	FIVISE806-9	IU-MSE15 IU-MSE10					
	disorders under specie	alizeu psychiati	ic care supervision.		<u> </u>							
Prereguisites	In accordance with the	e Rulebook on t	the Integrated Studies	at the School	ofMe	edicine Unive	ersity of Mostar.					
for the course												
enrolment												
	Week / shift	Topic										
Course	Lectures 1-30	Neura	al Sciences									
content		Exam	ination and Diagnosis	of the Psychia	atric Pa	atient tural Science	c					
		Schize	nhrenia Spectrum an	d Other Psych	notic D	lural Science	5					
		Mood	l Disorders	a ether i syer		10014615						
		Anxie	ty Disorders									
		Obses	ssive-Compulsive and	Related Disor	ders							
		Traun	na-Related Disorders,	Dissociative d	lisorde	ers						
		Feedi	ng and Eating Disorde	rs No Discord								
		Subst	ance use and Addictiv	re Disorders								
		Perso	nality Disorders									
		Treat	ment in Psychiatry									
	Public Psychiatry, Geriatric Psychiatry, End-of-Life Issues											
--------	---											
	Child Psychiatry											
	Forensic Psychiatry and Ethics in Psychiatry											
S1-S30	Neurobiological contributions to the etiology of mental disorders											
	Side effects of psychopharmaceuticals and possible complications during											
	treatment											
	Neurodevelopmental disorders - autism spectrum disorders and tic											
	disorders											
	Neurodevelopmental disorders - attention deficit, specific learning											
	disorders and motor disorders											
	Disruptive disorder, urge control disorder and behavioral disorder											
	Suicides and suicidal behavior											
	Normal and pathological mourning											
	Eating Disorders											
	Sleep-wake disorders											
	Community psychiatry											
	Permanent personality changes after catastrophic experiences											
	Adjustment disorder Developting disorders in gellipting some											
	Psychiatric disorders in palliative care											
	Psychosocial approach in the treatment and renabilitation of alcoholics											
	Scientific recearch in psychiatry											
	Social distinction											
	Derephilic disorders											
	Diagnostic procedures in psychiatry											
	Crisis situations											
	Organically conditioned / symptomatic mental disorders (acute brain											
	syndrome)											
	Chronic brain syndrome / dementia											
	Specific psychiatric disorders in women											
	Family and mental health											
	General principles of treatment of patients with mental disorders											
	Liaison psychiatry and psychosomatic medicine											
	Psychiatric comorbidity											
	Rehabilitation in psychiatry											
	Socio-therapeutic methods in the treatment and rehabilitation of the											
	mental disorders											
	Mental disorders and stigma											
P1-P30	Anamnesis and hetero-anamnesis											
	Mental status											
	Tests in psychiatry											
	Medical documentation											
	Protection of patients with mental disorders											
	Triage of patients											
	Acute conditions in psychiatry											
	Intensive care of the mentally ill patients											
	Neurotic patient											
	I nerapeutic approach to the neurotic patient											
	Depressed patient											
	Schizonbronio											
	Therapeutic approach to a schizophrenic nationt											
	Organic mental disorder											
	Therapeutic approach to organic mental disorder											
	PTSD											
	Therapeutic approach to trauma-induced disorders											
	Addiction diseases											
	Therapeutic approach to addiction diseases											
	Adolescent mental disorders											
I	-											

					Thera	peutic approac	h to developm	ental disorders			
					Socio-	therapeutic me	ethods of treat	ment			
					Thera	peutic commu	nity				
					The ro	le of teamwor	k in psychiatry				
Language	E	Inglis	sh								
E-learning	C c	Class comp	es are con pletely onlig	iducte ne via	d live. If neces e-learning platf	sary, lectures forms (Google I	and seminars Meet) up to a r	can be combir 209 naximum of	1ed (live %.	e an	d online) or
Teaching	Т	Гeacl	hing, intera	ictive a	and active-expe	riential.					
methods	methods										
Types of assessment (indicate - Bold)											
	-		Type of p	re-exa	mination obliga	ition		T	ype of e	xam	1
midterm	semin	ar	essay/re	port	practical/p	roject task	other	written	oral	ł	practical
	pape	er						exam	exam	<u>n</u>	
				A	location of ECT	S credits and s	hare in the gra	de			
Stud	ent obligations Learning outcome Hours of workload Share in ECTS Share in code									are in grade	
Attending classes	and eng	gagin	ng in			10	00	3,4		5%	
Seminar w	/ork			IU-N	/FMSE806-1-9		0	0,3			10%
Midterm/0	Colloqui	iums		IU-N	1FMSE806-1-9	10		0,3			20%
Pre-exam/	/Written	ו exa	m	IU-N	1FMSE806-1-9	10		0,3			30%
Pre-exam/	'Practica	al exa	am	IU-N	1FMSE806-1-9	5		0,2			10%
Oral exam				IU-N	1FMSE806-1-9	1	5	0,5	0,5		30%
			In total			15	50	5			100%
					Method of	calculating the	final grade				
Students'	engager	men	t in classes	s is va	lued during cla	asses and in fi	nal exam. Dur	ing classes the	e will b	oe se	eminar work
organized knowledge	as well e tests ir	⊤as f n ser	four knowl minars.	edge	tests: general p	osychopatholo	gy colloquium,	, casuistic repre	esentati	on t	est and two
Attending	classes	(lect	ures, clinic	al prac	ctices, seminars) will be value	d by maximum	of 5 points at tl	ne end o	of all	l successfully
finished kr	nowledg	ge te	sts. These j	points	can affect the f	inal grade, but	not the basic	points needed f	or passi	ing tl	he exam.
- 5	points -	- 100	0% attenda	ince in	all forms of cla	sses (lectures,	seminars, clini	cal practices)			
- 4	points -	–abs	ence from	any ty	pe of the lectur	e					
- 3	points -	– two	o absences								
- 1	point –	thre	e absences	5							
- 0	points -	– fou	ir absences	;							
Seminar p	aper inc	clude	es writing v	work a	and presentatio	n. Seminar val	idation will be	done by Study	regula	tions	s. i.e. writing
work will be valued 70% of the grade and presentation 30% of the grade.											
Writing ex	Writing exam:										
- T	he pape	er is e	exhaustive,	, grami	matically and or	rthographically	v correct – exce	ellent (5).			
- T	- The paper is formally and substantively satisfactory, but there are smaller grammatic and orthographic mistakes –										

very good (4).

- Paper satisfies formally and substantively, but major grammatical and spelling errors were noticed - good (3).

- Paper meets the formal criteria, but major deficiencies have been identified in terms of content - sufficient (2).

- The paper is not written, plagiarism is present or it does not meet the formal criteria - insufficient (1).

Presentation:

- Excellently presented work, almost without language errors, excellent cooperation and relationship with listeners - excellent (5).

- The work is very well presented, grammatical or pronunciation errors are rare, very good relationship with the listeners – very good (4).

- The paper is solidly presented, occasional errors in pronunciation or grammar - good (3)

- The paper is presented with quite frequent errors in pronunciation and grammar - sufficient (2).

- The paper is not presented or is presented with a lot of errors in grammar, pronunciation, in distinct address - insufficient (1).

This partial check lasts a total of 45 minutes and is evaluated with a maximum of 10 points.

- excellent (5) - 10 points
- yery good (4) - 8.5 points - good (3) - 7.0 points
- sufficient (2) - 5.5 points
- Insufficient (1) - 0 points.
Two colloquia (general psychopathology and a test in the form of a casuistic presentation) are taken by students in exercises. Test of knowledge in general psychopathology will be organized at the 14th exercise. The test will be in the form of a 25- question test with 5 answers offered (the correct answer carries 0.2 points). This test lasts a total of 30 minutes and the
evaluation of the test will be performed according to the Rulebook on Study: 91-100% correct answers - excellent (5), 79-90% - very good (4).
67-78% - good (3),
55 -66% - sufficient (2),
The maximum number of points is 5, and the minimum number of points for passing is 2.75.
The test in the form of a casuistic presentation is done on the penultimate exercise (V27, V28) and consists of the presentation of patients in the way it is presented to the doctor in the first meeting. Based on the data in the test, the student considers the differential diagnostic orientations and clinical procedures that need to be undertaken (work diagnosis, diagnostic guidelines, differential diagnostic options, therapeutic guidelines and emphases).
This partial check lasts a total of 30 minutes and is evaluated with a maximum of 5 points. - excellent (5) - 5 points
- very good (4) - 4 points
- good (3) - 3 points - sufficient (2) - 2 points
- Insufficient (1) - 0 points.
At the end of the seminar (S30) there will be a test of knowledge from the material covered by the seminars. The test will be performed with a test that will consist of 40 questions with 4 and 5 offered answers (correct answer carries 0.25 points).
This test lasts a total of 45 minutes and the test will be evaluated according to the Study Regulations: 91-100% correct answers - excellent (5), 79.90% - voru good (4)
67-78% - good (3),
55-66% - sufficient (2), 0 to 55% - insufficient (1).
The maximum number of points is 10, and the minimum number of points for passing is 5.5.
The final exam consists of a written, practical and oral part. Students who have duly attended classes according to the Faculty
The written exam will be in the form of a test with 100 questions with 4 or 5 answers offered, and will last 90 minutes (the
correct answer carries 0.3 points). The questions will cover the entire material from psychiatry, and the evaluation of the test will be done according to the Study regulations:
91-100% of correct answers - 5 (excellent),
67-78% - 3 (good),
55-66% - 2 (sufficient),
υ το 54% - 1 (Insufficient). The written exam is evaluated with a maximum of 30 points, and the minimum number of points for passing is 16.5
-Attendance at classes (lectures, exercises, seminars) - 1 - 5 points (can be obtained when a student collects 55 or more points through the passed teaching material).
The oral part of the exam is evaluated with a maximum of 30 points. Students draw five-question cards from the entire psychiatry curriculum.
- excellent (5) - 30 points
- very good (4) - 26 points - good (3) - 22 points
- sufficient (2) - 18 points

- insufficient (1) - 0 points.

Final grade:

The final grade is formed by the sum of points from all weights.

- Colloquium in general psychopathology (test) - 2.75 - 5 points

- Test in the form of a casuistic case report - 2 - 5 points

- Seminar paper - 5.5 - 10 points

- Test from the seminar material - 5.5 - 10

- Final written exam - 16.5 - 30 points

- Practical part of the exam - 5 - 10 points - Oral part of the exam - 18 - 30 points

Literature		Edi	tion		Lan				Type of li	terature	د
(indicate)	(title author year)		othor	croatian	onglich	othor	multilingual	book	articlo	corint	othor
(indicate)	(title, autior, year)	own	other	Croatian	english	other	multilingual	DOOK	article	script	other
Compulsor	Sadock BJ, Sadock VA,		х		х			х			
У	Ruiz P. Kaplan and										
	Sadock's Concise										
	Textbook of Clinical										
	Psychiatry. 4. ed.										
	Philadelphia: Wolters										
	Kluwer; 2017.										
Additional	Sadock BJ, Sadock VA,		х		х			х			
	Ruiz P. Kaplan &										
	Sadock's Synopsis of										
	Psychiatry, Behavioral										
	Sciences/Clinical										
	Psychiatry. 11. ed.										
	Philadelphia: Wolters										
	Kluwer; 2015.										
	Teaching materials	х			х						х
Additional co	urse information			•			•		•	•	
Method of m	onitoring the quality of tead	ching:									
Student surve	ey .										
Analysis of th	Analysis of the quality of teaching by students and teachers										
Analysis of passing exams											
Report of the Office for Teaching Quality											
Self-evaluation	on and non-institutional eva	luatio	n (visit d	of quality of	control te	ams)					

Study	MEDICAL STUDIES	IN ENGLISH									
programme		-									
Cycle	INTEGRATED	Туре	UNIVERSITY								
Study track	-	Module	-								
Year of study	5	Semester	IX								
Course title	SURGERY	Course code	MFMSE901								
ECTS	12	Status	OBLIGATORY								
	Teaching hours		Lectures	Exercises	Sem	inars	Practice				
	-		50	100	5	50	-				
Course objectives	Course objectives a To acquai To teach b further su	are: nt students wi pasic surgical t Irgical educatio	th surgical diseases and t echniques usable in a pri on.	techniques. imary care setti	ing and to se	erve a	s a base for				
Course	Learning outcome Student:	(LO)			Course lear outcome o	rning code	LO code at the study program level				
outcomes	Recognizes conditi	Recognizes conditions that require a surgical approach and treatment IU- MFMSE901- IU-MSE4									
	Is able to describe of asepsis and anti	and use basic sepsis used in	surgical techniques and t the treatment of surgica	the principles I patients.	IU- MFMSE 2	901-	IU-MSE1				
	Is skilled to take pa and can critically a clinical and diagno	atient's history nalyze and arg stic tests findir	and perform physical ex ue differential diagnosis	amination regarding	IU- MFMSE 3	901-	IU-MSE14				
	Is able to describe preoperative and postoperative management and surgical treatment for elective surgery patients in consultation with a specialist										
	Can recognize and functions in polytra	assess the ord	ler of urgency and ensure ients.	e vital	IU- MFMSE901- 5		IU-MSE10				
	Recognizes postop apply the appropri	erative compli ate treatment	cations and is able to an modality.	alyze and	IU- MFMSE 6	901-	IU-MSE11				
Prerequisites for the course enrolment	In accordance with	the Rulebook	on the Integrated Studie	s at the School o	of Medicine	Unive	ersity of Mostar.				
	Week / shift	Тор	ic								
Course content	Week 1	App Prec Post Sho Wot Infla Mar Abd Fluid	roach to the Surgical Pat operative Preparation S(toperative Care S(2h) toperative Complications ck & Acute Pulmonary Fa und Healing L(2h) ammation, Infection, & A nagement of the Injured ominal trauma S(1h) d, Electrolyte, & Acid-Bas	ient, Power Sou 2h) ailure in Surgica ntimicrobial Th Patient L(2h) se Disorders S(1	urces in Sur l Patients Si erapy in Su Lh)	gery L (2h) rgery	.(2h) S(2h)				
	Week 2	Surg Burn Brea Dise Dise Dise Cord Cord Con Tho Hea	gical Metabolism & Nutri ns & Other Thermal Injur ast Disorders L(2h) eases of the thoracic wall eases of the lungs L(2h) eases of the pleura S(2h) chanical circulatory suppo ponary artery disease L(2h) genital heart disease S(2h) genital heart disease L(2 racic aorta S(1h) rt transplantation S(1h)	tion L(2h) ies S(2h) and mediastin ort L(1h) i) h)	um S(2h)						

	We	ek 3		The	The acute abdomen I (2b)								
				Surg	erv of the oeson	hagus Liver Si	irgical anatomy	disea	ses and	d disorders			
				of th	e liver I (2h)	lingus liver, se		, uiscu	SCS un				
				Port	al hypertension '	S(1h)							
				Orga	an Transplantatio	S(1h)							
				Surg	ical diseases of k	oile ducts 1 (2b)							
				Surg	ical diseases of r	Dife ducts L(21)							
				Julg Ann	andix I (1h)								
				Appe	acos of the porit	cnoum S(1h)							
				Dise	ases of the perior	011euiii 5(111) [16]							
				Dian	bragmatic borni	 (2b)							
				Diap	Surgery of the oesophagus S(2h)								
				Surg	Surgery of the desophagus S(21) Surgery of stomach and duodenum L(2h)								
				Surg	Small bowel surgery S(2h)								
	14/2	al: 4		Sina	Small bowel surgery S(2h)								
	we	ек 4		Surg	ical diseases of c	colon and rectu	um L(ZN)						
				Diag	matory bower di	sease s(211)	atal wa ai a a 1 /2h						
				Dise	ases of the anus	and the anore	ctal region L(2n	l) 					
				Dise	Diseases of the anus and the anorectal region S(2h)								
				Spier	Spleen L(2h)								
				Arto	rial acquisive dia			211)					
				Arte	rial occlusive dis	ease L(2n)	N N						
				LOW	er extremity amp	outations S(In) 						
				Vasc	rioveneus fistula	orders, inoraci	c outlet syndrol	me					
				Arte	Arteriovenous fistulas S(1h)								
				Arte	Arterial aneurysms, Abdominal aortic aneurysms, Iliac aneurysms,								
				Supr	Suprarenai aortic aneurysms, kuptured aortic aneurysms L(2n)								
				Infla	matory aneurysi	ms, infected ar	ieurysms. Perip	neral a	irteriai (24)	aneurysms.			
				Uppo	er extremity ane	urysms, viscer	al artery aneur	ysms S	(2n)	· · · ·			
	we	ек 5		Cere	brovascular dise	ase, Renovasc	ular hypertensi	on, ivie	esenter	ic ischemia			
				synd	Iromes L(2n)	1: I C/2							
				Vein	s and lymphatics	s disorders S(2	n)	、					
				Graf	ts and flaps and	Principles of w	ound care L(2n)	6 (1))				
				Diso	rders of scaring.	Benign and pr	emalignant skin	lesion	i S(2h)				
				Mali	Breast reconstruction Lower extremity reconstruction Pressure sores S(2h)								
				Brea	Breast reconstruction Lower extremity reconstruction Pressure sores S(2h)								
				Hand	Hand surgery L(2h)								
				Aest	Aesthetic surgery S(2h)								
				Mini	Minimal invasive surgery – laparoscopy S(2h)								
	-			Mini	mal invasive sur	gery – VATS L(2h)						
Language	Eng	lish							/1.				
E-learning	Clas	sses are co	onduct	ed live. It nece	essary, lectures a	and seminars c	an be held com	bined	(live ar	id online) up			
	to a	maximur	n of 20	1%.				_	_				
Teaching	Теа	ching, par	rticipat	ory and intera	active and active	-experiential.							
methods													
				Types of	assessment (inc	licate - Bold)							
		Type of p	pre-exa	mination obli	igation		-	Type of	exam				
midterm sem	ninar	essay/re	eport	practical/	project task	other	written	or	al	practical			
ра	per						exam	exa	Im				
			/	Allocation of E	CTS credits and	share in the gr	ade			<u> </u>			
Student of	oligatio	ons	L	earning	Hours of v	vorkload	Share in EC	TS	Sha	ire in grade			
			out	come code									
Attending	g cours	se			20	0	6,7			0 %			
Seminar	Seminar paper				15	5	0,5			0 %			
Pre-exam/Pra	actical	exam	IU- N	/IFMSE901-3	15	5	0,5			10%			
	IU- MFMSE90			/IFMSE901-1									
Pre-exam/Written exam IU- MFMSE901				60		2			EO 0 '				
Pre-exam/W	ritten	exam	IU- N	AFMSE901-2	60)	2			50 %			
Pre-exam/W	ritten	exam	IU- N IU- N	AFMSE901-2 AFMSE901-5	60)	2			50 %			

	IU- MFMSE901-5								
	IU- MFMSE901-6								
In total		360	12	100%					
Method of calculating the final grade									
Practical exam consists of taking differential diagnosis, diagnostic	g medical history an c procedures and tre	d performing clinical examinat eatment options. Practical exa	ion of the patient with m makes 10% of the g	rade (PG).					

Written exam – 100 multiple choice questions (one correct answer) with no negative points. Written exam makes 50% of the grade (WG).

The assessment of the written exam is carried out according to the Regulation of Studies of the University of Mostar and applies to all study groups. According to the Rulebook on Studying final grade is obtained as follows:

A = 91-100% 5 B = 79 to 90% 4 C = 67 to 78% 3 D = 55 to 66% 2 F = 0 to 54% 1

Oral exam – cards with questions from teaching units. Cards with questions for the oral exam will be available to the students during the course. **Oral exam makes 40% of the grade (OG).**

Final grade (FG) is calculated through formula:

FG = WG*0,5+PG*0,1+OG*0,4

Literature	Title	Edi	tion		Lan	guage			Type of l	iteratur	е
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Doherty, G. M. (2020). Current Diagnosis and Treatment Surgery, 15th Edition, McGraw-		x		x			x			
Additional	Townsend, C. M. (2021). Sabiston Textbook of Surgery E- Book: The Biological Basis of Modern Surgical Practice, Elsevier Health Sciences.		x		x			x			

Additional course information

- The course consists of lectures (45 hours), seminars (50 hours), and clinical exercises (100 hours).
- Attending all forms of teaching *is mandatory*, which will be recorded.
- Lectures and seminars will be held at Medical School.
- Students must be prepared for seminars.
- Clinical exercises will be organised from 8,15 11:15 according to schedule at Surgical Clinic (except for the first day)
- Schedule for clinical exercises will be posted with assigned teaching assistant.
- For clinical exercises students are required to have: white coat, stethoscope, notepad, pencil and booklet of clinical skills.
- Students are required to report to appointed teaching assistant at the Department at the beginning of clinical exercises.
- As a part of clinical exercises students are required to do four to five "on duty" shifts, in time from 16:00 h to 20:30 h.

Study		MEDIO	CAL STUDIES	IN ENGLIS	SH							
programme	Ę			Turne								
Cycle Studu tra ale		INTEG	RATED	Type		UNIVERSITY						
Study track		- -		Somosto		-						
Year of stud	у			Semeste	er							
Course title	2	NEUR	OSURGERY	code		MFMSE902						
ECTS		1		Status		OBLIGATORY						
		Teach	ing hours			Lectures		Ex	ercises	Seminars	Practice	
Course		The e	im of the n			/	iro kr			/	U Dispation of the	
objectives		neuro diseas neuro in neu	surgical pati es of the ce surgical oper rosurgery.	ent, abound ntral and ations, at	ory co or p out t	gnostic and the eripheral nervou he types of neurc	rapeut s syste	ic proce em, abo al opera	e about the edures for out the degr ations and th	e clinical exampatients with ee of urgency heir success and	injuries and/or when applying d complications	
Course		Learni Stude	ng outcome nt:	(LO)						Course learning outcome code	LO code at the study program level	
outcomes		Recog proce	nizes condit dure.	tions tha	it red	quire a neurosi	urgical	approa	ach and	U- MFMSE902-1	IU-MSE4	
		Capab classif	le of assessir ying cranioce	ng the urg erebral inj	gency juries	of the necessary according to seve	meas erity (0	ures (AB GCS).	CD), and	U- MFMSE902-2	IU-MSE6	
		Recog system	Recognizes and can evaluate diseases and injuries of the central nervous IU- IU-MSE10 MFMSE902-3									
	-	Descri	bes measu	res agair	nst i	ncreased intrac	ranial	pressu	ire, and	U-	IU-MSE8	
		proce	procedures for subarachnoid hemorrhage after intracranial aneurysm MFMSE902-4									
		Recog	e. nizes possibl	e early po	stope	erative complicati	ons in	the trea	tment of	U-	IU-MSE11	
		the most common neurosurgical diseases and injuries (infection, MFMSE902-5 IU-MSE15									IU-MSE15	
		dehiso	ence of the	operative	e wou	und, as well as r	espira	tory and	d urinary			
		compl	ications), an	d is able	to a	nalyze the a	approp	oriate tr	reatment			
		modal	ity.									
Prerequisite	es	In acco	ordance with	the Rule	book	on the Integrated	Studi	es at the	School of N	Aedicine Unive	rsity of Mostar.	
for the cour	rse											
enrolment												
		Week	/ shift		Торі	с						
Course		Lectur	es		(L1)	Neurosurgical pro	opaed	eutics				
content					(L2,	L3) Neurotrauma	tology					
					(L4, (L6)	Spinal neurosurg	gy erv					
					(L7)	Vascular neurosu	rgery					
		Semin	ars		(S1,	S2) Peripheral an	d auto	nomic r	nervous syst	em surgery		
					(S3)	Pain surgery						
					(S4,	S5) Pediatric neu	rosurg	ery				
	-	Fuerei			(56,	S7) Infections in i	neuros	urgery	antiona Ma	rk in the word	and alinia	
		Exerci	ses h		(61-	- EO) ASSISTING IN S	surgica	ai intervo	entions. wo	rk in the ward		
E-learning		Classes are conducted live. If necessary, lectures and seminars can take place combined (live and online)										
		via e-l	earning platf	orms (Go	ogle M	Meet) up to a ma	ximum	n of 20%				
Teaching		Teach	ing, participa	tory and	intera	active and active-	experi	ential.				
				Τv	pes o	of assessment (ind	licate	- Bold)				
		7	Type of pre-e	xaminatio	on ob	ligation				Type of exa	m	
midterm	sem	ninar	essay/repo	rt pra	actica	l/project task	ot	her:	written	oral	practical	
	ра	per		Allocati	on of	ECTS credits and	share	in the g	exam rade	exam		

Student o	bligations		aarning		Hours	ofwork	oad	Share i	n FCTS	CI	are in a	rade
Student d	oligations	outo	ome co	ode	nouis		Uau	Sharen	II LUIS	5		Taue
Attendir	ig classes	oute	onne et	Juc		20		0.	8		0%	
Pre-exam/w	vritten exam	IU-M	FMSE90)2-1		5		0.	1		50%	
		IU-M	FMSE90)2-2		-			_			
		IU-M	FMSE90)2-5								
Pre-exam,	/oral exam	IU-M	FMSE90	02-1	5			0.	1		50%	
		IU-MFMSE902-3		02-3								
			FINISE90)2-4)2 5								
	In total	10-101	FIVISLE	52-5		30		1	1		100%	
Met					of calculati	ng the fir	nal grade		<u>.</u>		100/0	1
The final grade is obtained as the arithmetic mean of the grades from the written exam and the oral part of the exam												
Literature	Title		Fdi	ition		lan				Type of I	iteratur	<u>п.</u> Р
(indicate)	(title author	vear)	own	other	croatian	english	other	multilingual	book	article	scrint	other
(indicate)		yeary		other	croatian	crightin	other	matangua	book	urticie	Seripe	other
Compulsory	Handouts		х			x						x
Additional	Josip Paladii	no:	х		х				x			
	Kompendij											
	neurokirurgije. Zagrabi Naklad	urokirurgije.										
	Lievak: 2004											
Additional cou	rse information					I	I		I			
Neurosurgery	classes last 20	hours	of whit	h 7 ho	urs are lec	tures 7	hours ai	re seminars a	nd 6 ho	urs are	evercise	as It is
listened to du	ring one week. S	Student	s are d	livided i	nto practic	ce groups	. Fach g	roup is assign	ned an a	assistant	. The as	sistant
trains a group	of students in th	e neur	osurgic	al skills	of taking t	he histor	v and sta	atus of neuros	surgical	patients	. as well	as the
basic techniqu	les of everyday	neuros	urgical	practic	e. During	the exerc	, cises, all	students hav	e acces	s to ope	erating i	rooms,
where they lea	arn to behave ac	cording	to the	rules o	f asepsis.					•	0	
The practical p	art of the classe	s is the	refore	usually	held in the	morning	hours s	o that student	ts have	access to	inpatie	nt and
outpatient wo	rk at the Clinic fo	or Neur	osurge	ry.								
Lectures and	seminars includ	e	neuros	surgical	propaede	utics, clir	nical tra	umatology of	the er	ndocrani	um and	spine,
neurooncology surgery.	y, vascular neuro	osurger	y, ped	iatric ne	eurosurger	y, spinal	neurosı	urgery, infecti	ons in I	neurosur	gery an	d pain
Five days afte	r the class, stude	ents wi	ll have	an exa	m, which	consists o	of two p	arts. The writ	tten exa	am consi	sts of 3	0 test-
questions (one	e of the five offe	red ans	wers is	always	correct).	After pas	sing the	written part o	of the e	xam, the	studen	t has a
prerequisite fo	or the oral exam.											
The final grade	The final grade is obtained as the arithmetic mean of the grades from the written exam and the oral part of the exam.											
According to t	he Rulebook on S	Studyin	g at th	e Unive	rsity of Mo	star grad	es are a	ssigned as fol	lows:			
0-54% insuffic	ient (1);											
55-66% suffici	ent (2);											
67-78% good (3);											
79- 90% (very	good 4);											
91-100% excel	lent (5).											

Study	MEDICAL STUDIES IN	ENGLISH										
programme		Tuno										
Cycle	INTEGRATED	Type	UNIVERSITY									
Study track	- r	Nodule	-									
Year of study		Semester										
Course title		Course	MFMSE903									
	TRANSPLANTOLOGY	coue										
FCTS	1	Status	OBLIGATORY									
	Teaching hours		Lectures	Exercises	Seminars	Practice						
			7	8	5	0						
Course	- To provide students	with knowled	e regarding transfus	ion medicine and	transplantation	biology						
objectives	- To provide students	with knowled	ge regarding blood gi	roups, blood produ	icts and the spe	cifics of						
	transfusion medicine	in terms of car	re for pregnant wom	en, newborns and	pre/post-transp	lant patients						
	Learning outcome (LO)			Course	LO code at the						
	Student:				learning	study program						
Course					outcome code	level						
learning												
outcomes	- recognizes ar	nd defines the	importance of trans	fusion medicine	IU-	IU-MSE-1						
	as a specific h	nealth activity	. Defines and enume	rates blood	MFMSE903-1	IU-MSE-8						
	groups and o	ther blood sys	stems in transfusion i	medicine, blood								
	products and	methods of t	heir production, stor	age and								
	distribution.											
	- describes the	e specifics of t	ransfusion medicine	in terms of care	IU-	IU-MSE-2						
	for pregnan	not pregnant women, newborns and pre/post-transplant withouses 2 10 mises										
	defines and	analyzos the	choice and appli	sation of blood	111-	III-MSE-6						
	- uennes anu	analyzes the	and late nost-trans	fusion reactions	MFMSE903-3	IU-MSE-10						
	with diagnos	tic confirmatio	on.			IU-MSE-11						
	- classifies th	ne risk of l	bloodborne disease	s transmission,	IU-	IU-MSE-4						
	describes th	e importance	e describes the imp	oortance of the	MFMSE903-4	IU-MSE-8						
	awareness of	f bloodborne o	diseases, as well as th	ne importance of								
	immunohem	atological test	ing during pregnancy	/ for mother and								
	Child	trancolont	protocol IIIA t	uning onti III A								
	- explains the	nd pre- and pr	ost-transplant treatm	yping, and care	MFMSE903-5	IU-MSE-8						
	untiboules, u					IU-MSE-9						
						IU-MSE-15						
						IU-IVISE-16						
Prerequisites	In accordance with the	e Rulebook on	the Integrated Studi	es at the School of	Medicine Unive	ersity of Mostar.						
for the course						,.						
enrolment												
	Week / shift	Topic										
Course	Lecture	(L1) I	ntroduction to the s	ubject and historic	al review; Gene	ral principles of						
content		blood	I donation.									
		(LZ) P	roduction of blood p	roducts; Quality sy	stem in transfu	sion medicine.						
		in Tra	insplantology.	aps, other blood g	, oups, mea syst	cm, importance						
		(L4) T	ransfusion treatmen	t								
		(L5) T	ransfusion reactions;	Systematic super	vision of transfu	sion and post-						
		trans	plantation treatment	;	_							
		(L6) C	Quality control in labo	pratory diagnostics	of transplanted	patients						
	Sominar	(L7) L	aboratory diagnosis (of nemostasis diso	raers							
	Seminar	(S1) B (S2) D	sone marrow and sto	m cell donor regist	ries							
		(SZ) B (SZ) F	listocompatibility and	d immunogenetics								
		(33)1										

				(S4) ⊢	lemolytic	disease o	f the ne	wborn						
	Exercises			(55) F E1) E> (E2) C	aminatio etermina	n of blood tion of bl	d donor: ood gro	s ups						
				(E3) P (E4) Is	roductior ssuance o	n of blood f blood p	l produc roducts	ts						
				(E5) Prenatal testing (KG and ICT)										
				(E6) HLA typing, molecular diagnostics										
				reagents and events										
				(E8) R	(E8) Recruitment of bone marrow stem cell donors									
Language	English													
E-learning	Classes are c completely or	onducte: nline via	d live. e-learr	If necessary, lectures and seminars can be combined (live and online) or ming platforms (Google Meet) up to a maximum of 20%.										
Teaching	Teaching met	Teaching methods, participatory and interactive methods.												
methods	Types of assessment (indicate - Bold)													
	Type of	Type of pre-examination obligation Type of exam												
midterm s	eminar es	say/	pra	ctical/p	l/project task other			written		oral	prac	ctical		
	paper rej	port						exam		exam				
Student e	bligations	A	llocatio	on of EC	TS credits	s and sha	re in the	e grade Sharo i	n ECTS	CI	aaro in o	rado		
Student o	bligations	Leann	code	Lonne	nou		lloau	Sharen	ILCIS	5		jiaue		
Attendin	g classes		12 1		20		0.6	0.66			,			
Pre-exam/ w	/milen exam	FMSE90)3-1)3-2		10		0.3	0.34)			
	FMSE90)3-3												
		IU-M IU-M	FMSE90 FMSE90)3-4)3-5										
	In total					30		1	_		100%	,)		
			M	ethod o	of calculat	ing the fir	nal grad	e						
The exam is po	erformed as a w signed as follows	ritten ex	am. Ao	cording	g to the R	ulebook	on the li	ntegrated Stu	dies at 1	the Scho	ol of Me	edicine		
0-54% insuffic	ient (1),													
55-66 % suffic	ient (2),													
67-78 % good	(3), good 4)													
91-100% excel	lent (5).													
Literature	Title		Edi	tion		Lar	iguage			Type of l	iteratur	e		
(indicate)	(title, author,	year)	own	other	croatian	english	other	multilingual	book	article	script	other		
Compulsory	Harmening DN	1.		х		x			х					
	Modern Blood													
	Transfusion Pra	actice.												
	F.A.Davis Com	pany												
	2018, VII editio	on.												
	classes	es from	х	x		x								
Additional	0.00000													
Additional cou	rse information													
The Transfusio	logy and Transp	lantolog	y cours	se conta	ains 20 ho	urs of cla	sses wh	ich are condu	cted du	ring the	period c	of 1		
week, includin	g also the pre-exists of lectures of	xam. Seminars	ando	arcises	It is nor	ihle to o	ognize (onsultations	during t	he cour	o Durir	ng the		
seminars, the	teacher discusse	es specifi	c topics	s in trar	nsfusion m	nedicine v	samze (with the	students. At 1	the end	of the cours	ourse, a	BUIE		
written exam	will be performe	d. By cor	npletir	ng all th	e teachin	g activitie	s and p	assing the wri	tten exa	am, the s	tudent			
acquires 1 ECT	acquires 1 ECTS point.													

Study	MEDICAL STUDIES	IDIES IN ENGLISH											
Cycle		Type											
Study track	INTEGRATED	Modulo		UNIVERSIT									
Yoar of study	- c	Somostor	r										
Course title		Course	1										
Course title	UKULUGY	code		WIFWISE904									
ECTS	1.5	Status		OBLIGATORY									
	Teaching hours		_	Lectures	Exercises	Seminars	Practice						
	I			10	10	10	-						
Course objectives	To achieve studen necessary for unde judgment, rational conditions	t's knowle erstanding I treatmen	dge o the p t of tl	f the basic principles in pathophysiological basis he most common urolo	urology. Expand s, recognition of c gical diseases, on	the knowledge linical symptom cological and er	and skills s, critical nergency						
Course	Learning outcome Student:	(LO)				Course learning outcome code	LO code at the study program						
learning	Presents and inter	rprets hist	orv a	ry and clinical examination of a urological IU- IU-MSE2									
outcomes	patient and knows	anatomy	of the	f the male and female urogenital tract. MFMSE904-1 IU-MSE4									
		,		IU-MSE5									
	Critically accorde	and ovala	inc n	ns nathanhysiological mechanisms, clinical, IU-									
	and laboratory fea	allu expla	nns p atmer	athophysiological met	e most common	MFMSE904-2	IU-MSE8						
	urological diseases	5	unici				IU-MSE9						
							IU-MSE10						
							IU-MSE11						
	Describes and exp	lains the e	etiopa	thogenetic mechanism	ns of diseases in	IU-	IU-MSE4						
	urological oncolog	y, and pre	sents	diagnostic tools and m	nodern methods	MFMSE904-3	IU-MSE5						
	of surgical treatme	ent.					IU-MSE6						
	-						IU-MSE9						
							IU-IVISE10 IU-MSF11						
							IU-MSE15						
							IU-MSE16						
							IU-MSE17						
	Explains and inte	erprets th	e ba	sic and ethical princi	iples of kidney	IU- MEMSE904-4	IU-MSE2 III-MSE3						
	transplantation.						IU-MSE5						
							IU-MSE7						
							IU-MSE9						
							IU-MSE12						
	Critically analyzes	and expla	ins p	athophysiological mech	nanisms, clinical	IU-	IU-MSE4						
	and laboratory	features	of	emergency condition	is in urology,	MFMSE904-5	IU-MSE8						
	recommends class	ification a	nd th	erapeutic approaches.			IU-MSE11						
	Lists and explain	s minimal	lly in	vasive endourological	procedures in	IU- MFMSE904-6	IU-MSE4 IU-MSE15						
	modern arology.						IU-MSE17						
			IU-MSE19										
Prerequisites	In accordance with	the Ruleb	nook c	on the Integrated Studie	es at the School of	Medicine Unive	ersity of Mostar						
for the course							and the second sec						
enrolment													
	Week / shift		Торіс										
Course content	1 st day		Intro	duction to the subject a	and historical revi	ew							
			Anan	nnesis, Clinical examina	ation								
			Basic	laboratory and diagno	stic tests								
			Urina	ary disorders and neur	rophysiology of l	arination, Neuro	ogenic bladder,						
	2 nd day		Ohst	ructive uronathy diago	losis and treatme	nt							
			0.000	a state a opacity, aidgi									

					Uroli	thiasis, diag	gnosis ai	nd treatm	nent						
	ard	dav			Infec	tions of the	urogen	ital tract,	, diagnosis	and	treatn	nent			
	5	uay				enital traun	na	urology							
					Benig	gn prostate	enlarge	ment - B	enign pros	tatic	hyper	plasia			
					Kidne	ey transplar	ntation,		0 1		,,				
					Mini	mally invasi	ve surgi	al proce	dures in th	e trea	atmen	nt of uro	ogical p	atients	
	4 th	day			Kidne	ey and adre	nal tum	ors							
					Tumo	ors of the b	oladder,	upper u	rothelial a	nd u	retera	l tumor	s and u	rethral	
					tumo	ors									
	5th	dav			Prost	ors of the period	diagno	testicies	irgical trea	tmer	nt.				
	Eng	alish			11030		ulugilo								
E-learning	Cla	sses are c	onducte	d live.	If is ne	ecessary, le	ctures a	nd semir	nars can be	helo	d com	bined (li	ve and o	online)	
•	or	completely	y online	via e-l	earnin	g platforms	(Google	e Meet) ເ	ip to a max	imu	n of 2	0%.		·	
Teaching	Теа	ching, int	eractive	and a	ctive- e	experiential	•								
methods				Tv	nos of	accoccmon	t (indica	Bold)						
		Type of r	ore-exai	ninatio	on obli	pation	t (inuica	le - Dolu	<u>)</u>		Τνρε	of exa	n		
midterm s	eminar	essay/re	eport	pra	ctical/	project task	:	other	writ	ten	.,,,,,	oral	prac	ctical	
	paper		•			-			exa	m		exam			
			A	llocatio	tion of ECTS credits and share in				grade						
Student	obligati	ons	Le outce	earning ome co	g Hours of v ode			load	Sha	re in	ECTS	S	nare in g	grade	
Class attenda	ance and						30					-			
engagement										0.5					
Pre-exam/ Fi	nal exan	ו	IU-MI	FMSE90 FMSE90)4-1)4-2		15			0.5			100%	5	
			IU-MI	FMSE90)4-3										
			IU-M	FMSE90)4-4										
			IU-MI	-MSE90 FMSE90)4-5)4-6										
		In total	10 111	TTISESC	/10		45			1.5			100%	,)	
				Μ	ethod	of calculati	ng the fi	nal grade	5						
The final grad	de is obt	ained on t	he writt	en exa	am if th	ie student i	s satisfie	ed with th	he grade, a	nd if	he/sł	ne want	s to ansv	wer for	
a higher grad	le, then	he/she ta	kes the	oral e	kam wl	nere the fin	al grade	is the a	verage of t	he g	rade o	of the w	ritten ar	nd oral	
exam.	the Pule	book on S	tudvina	at the	Univo	rcity of Mo	tar ara	los aro a	scianod as	follo					
0-54% insuffi	cient (1)	: 55-66% s	sufficien	t (2): 6	57-78%	good (3): 7	'9- 90%	verv god	od 4): 91-1)0% (ws. excelle	ent (5).			
Literature	,	Title		Ed	ition		La	nguage	- // -			Type of	literatur	e	
(indicate)	(title	, author, γ	/ear)	own	other	croatian	english	other	multilingua	ıl	book	article	script	other	
Compulsory	Urolog	y for N	1edical	х			х				х				
	studer	nts and	junior												
	doctor	s, Ricky	Ellis												
Additional	2020	ad chant	orc of												
Additional	Smith'	s Urology	19 th												
	Edition	n, McGrav	w Hill												
	2019														
Additional co	ourse info	ormation													
Students are	obliged	to regular	ly atten	d and a	actively	/ participate	e in all fo	orms of c	lasses. The	exa	m in u	rology is	s taken i	n pre-	
wants a high	ie class a er grade	and consis	us of a V written	vritten exam	exam. the or:	n the stude	ent is NC aken Δf	i satistie ter that	u with the	grad e of i	e on t the w	ritten ar	en exañ Id oral e	i allu xam	
grades is use	d to calc	ulate the f	final gra	de (ari	thmeti	c mean).		cer thut,	the averag			interi ul			
To pass the e	es is used to calculate the final grade (arithmetic mean). ass the exam and obtain sufficient grade, the student must answer 55% of the questions correctly.														

Study programme	MEDICAL STUDI	EDICAL STUDIES IN ENGLISH										
Cycle	INTEGRATED	Туре	UNIVERSITY									
Study track	-	Module	-									
Year of study	5	Semester	IX									
Course title	PEDIATRIC SURGERY	Course code	MFMSE905									
ECTS	1.5	Status	OBLIGATORY									
Г	Feaching hours		Lectures	Exercis	ses	Seminars	Practice					
			20	5		5	-					
Course objectives	The goal of pedi surgery necessa treatment of su	atric surgery o ry for a docto rgical diseases	classes is to acquire bas r of medicine. To train s s in children necessary f	ic knowledge tudents for re or primary	and skills ecognitio / practice	in the field of peon n, early detection,	liatric initial					
Course learning outcomes	Learning outcon Student:	rning outcome (LO) dent: code code LO code at the study program level U-MFMSE905-1 IU-MSE4										
	Recognizes con procedure.	ognizes conditions that require a surgical approach and IU-MFMSE905-1 IU-MSE4 cedure.										
	Describes basic conditions that treatment and t	scribes basic knowledge about childhood diseases, injuries and IU-MFMSE905-2 IU-MSE1 nditions that require surgical treatment, the basics of surgical atment and the conditions necessary for safe surgical work.										
	Has the skill of patient's status working diagno diagnostic tests.	taking anamn , and he car sis from the	esis and hetero-anamn n critically analyze and clinical picture and th	esis and the d argue the e results of	IU-MFM	SE905-3	IU-MSE14					
	Performs skills ir become familiar as esophagea intussusception	n the field of c with the mo Il atresia,	linical examination of pa st common surgical pat duodenal ileus, a	atients, to hology such appendicitis,	IU-MFM	5E905-4	IU-MSE17					
	Describes treat epiphyseal bond common childh treatment proce hypospadias and in the care of all	ment proces e fractures, i ood tumors, ess for suspect d assess the do mentioned	s for omphalocele, g nguinal hernia, knows as well as the dia ted vesicoureteral reflux egree of burns and basic	astroschisis, the most agnostic and k, recognizes procedures	IU-MFM	5E905-5	IU-MSE10 IU-MSE8 IU-MSE11					
Prerequisites for the course enrolment	In accordance w	ith the Rulebo	ook on the Integrated St	tudies at the S	School of	Medicine Univers	ity of Mostar					
Course content	Week / shift	То	pic									
	Lectures	(L1) Historical developmen	nt of pediatric	surgery							
		(L2) Anomalies of the head and neck										
		(L3	8,4) Esophageal atresia									

				(15.6) Duodenal ileus									
				(L5	(L5,6) Duodenal ileus (17) Congenital diaphragmatic hernias								
				(L7 Hy) Congenital d pertrophic ste	iaphragmatic hern nosis of the pyloru	ias Is						
				(L8) Types of inte	estinal atresia, App	endicitis of childh	ood					
				(L9) Intussuscept	ion							
				(10) Abdominal t	rauma							
				(L1	1) Childhood t	umors							
				(L1	2) Omphaloce	le							
				(L1	3) Gastroschis	is							
				(L1	4) Hydroneph	rosis, Anomaly of t	the number and p	osition of	f the k	idneys			
				(L1	5) Vesicourete	eral reflux							
				(L1	6) Hypospadia	15							
				(L1	7) Meconium	ileus							
				(L1	8) Epiphyseal	bone fractures							
				(L1	(L19) Congenital megacolon.								
				(L2	(L20) Rectal and anal atresia.								
		Seminar	s	(S1) Umbilical he	rnia							
				(52) Inguinal herr	nia							
				(53) Cryptorchidi	sm							
				(00									
				(54) Phimosis								
				(S5) Burns in chil	dren							
		Exercise	S	(E1	– E5) Assistin	g in surgical interv	entions. Work in t	he ward	and cl	inic.			
Language		English											
E-learning		Classes up to m	are condu ax 20 %.	cted live. If	necessary, lec	tures and seminar	s can take place c	ombined	(live	and online)			
Teaching methods		Teachin	g, particip	atory and in	teractive and a	active-experiential							
1				Туре	es of assessme	nt (indicate - Bold)						
		Туре	e of pre-ex	amination o	bligation	pe of exa	m						
midterm	semi	nar e	essay/	practical/	project task	other	written exam	oral e	am	practical			
	Pap			Allocation	of ECTS credit	s and share in the	grade	<u> </u>					
Student	obliga	tions	Learning	goutcome	Hours	of workload	Share in FC	TS	Sha	re in grade			
			C	ode						0.200			
Attendi	ng cla	sses				30	1 0%			0 %			

Pre-exam/Practical	IU-MFMSE905-3	5	0,16	0 %						
Pre-exam/Written exam	IU-MFMSE905-1 IU-MFMSE905-2 IU-MFMSE905-5	5	0,17	50 %						
Pre-exam/Oral exam	IU-MFMSE905-1 IU-MFMSE905-4 IU-MFMSE905-5	5	0,17	50 %						
In tota	al	45	1,5	100%						
	Method of calculating the final grade									

The final grade is obtained as the arithmetic mean of the grades from the written exam and the oral part of the exam. According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90% (very good 4); 91-100% excellent (5).

Literature (indicate)	Title	Edition				Type of literature					
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	O'Neill JA, Rowe MI, Grosfeld JL, Fonkalsrud EW, Coran AG. Pediatric surgery. St Louis, Baltimore, Boston, Mosby Co, 1999		x		x			x			
	Rockwood Ch, Green D. Fractures in children. Philadelphia, London, Mexico City, New York, Lipping Co, 1984		х		х			x			
	Prem Puri, Pediatric Surgery (Springer Surgery Atlas) 2nd Edition, Springer Surgery Atlas, 2006.										atlas
Additional											
Additional cou	rse information:	ł		•		,	ł	,			

Classes in pediatric surgery last 30 hours, of which 5 hours are exercises. Students are divided into smaller practice groups and each group is assigned an assistant. The assistant trains a group of students in the clinical skills of taking an anamnesis and the status of surgical patients, as well as in the basic techniques of suturing a surgical wound. During the exercises, all students have access to operating rooms, where they learn to behave according to the rules of asepsis. The practical part of the classes is therefore usually held in the morning hours so that students have access to inpatient and outpatient work. **Seminars** are a pre-examination obligation for students, which they must prepare in cooperation with the teacher.

Lectures include the general and special part of pediatric surgery. The special part consists of neonatal, abdominal, thoracic surgery, urology and pediatric traumatology.

One week after the class, students have an exam, which consists of two parts. The written exam consists of 30 questions. Passing the written part of the exam is a prerequisite for the oral exam.

The final grade is obtained as the arithmetic mean of the grades from the written exam and the oral part of the exam.

Study	MEDICAL STUDIES	DICAL STUDIES IN ENGLISH										
programme												
Cycle	INTEGRATED	Туре	UNIVERSITY									
Study track	-	Module	-									
Year of study	5	Semester	IX									
Course title	CLINICAL	Course	MFMSE906									
FCTS	2	CODE Status										
	Teaching hours	Status	Lectures	Exercises	Seminars	Practice						
	reaching nours		5	35	10	0						
Course objectives	To teach students procedures with a To train students t Achieve students' well as the role of	the basics of t n emphasis or o recognize o understandin the family ph	tumor etiology, general and n modern treatment of so ncological emergencies, g of the importance of a ysician in the care of the	and specific diagno olid tumors. as well as side effo holistic approach se patients.	ects of oncology to oncology pat	eutic / therapy. ient care, as						
Course	Learning outcome Student:	(LO)			Course learning outcome code	LO code at the study program level						
outcomes	Describes and ex	plains the ba	the basic concepts of biology, etiology and IU- IU-MSE1									
	epidemiology of ca	ancer.	MFMSE906-1 IU-MSE5									
	Lists and describ	pes the type	the types of primary prevention, secondary IU- IU-MSE1									
	Describes a multid	lisciplinary an	proach to cancer treatm	ent and types of	IU-	IU-MSE6						
	diagnostics (molec	cular and labo	ratory, pathological and	cytological).	MFMSE906-3	IU-MSE9 IU-MSE10						
	Describes the psy	chosocial app	proach to the patient w	vith a malignant	IU-	IU-MSE13						
	disease and the ro	le of the fami	ly medicine doctor in the	e comprehensive	MFMSE906-4							
	approach to the o	ncology patier	nt.									
	Analyzes and exp	lains the dif	ferences between adju	vant treatment,	IU- MEMSE906-5	IU-MSE1 IU-MSE10						
	terminal phase, ar	nd explains th	e basics of radiotherapy	chemotherapy.								
	hormone therapy,	immunothera	apy, targeted therapy an	d other forms of								
	oncology therapy a	and lists their	forms, methods of applie	cation, goals and								
	Lists and classifies	the most com	nmon side effects of onco	ology treatment,	IU-	IU-MSE4						
	including emergen	cies caused b	y oncology treatment.		MFMSE906-6							
	Lists and describes	the etiology	and epidemiology, meth	ods of diagnosis,	IU-	IU-MSE4						
	types of therapy,	monitoring a	nd prognosis in cancer (of various organ	MFMSE906-7	IU-MSE5 IU-MSE6						
	sites (breast cance	er, lung cance	r, skin cancer - with spe	tumors of the		IU-MSE10						
	gastrointestinal sy	stem, urogen	ital tumors, gynecologic	cal tumors, head		IU-MSE14						
	and neck tumors).	, -0,		,								
	T											
Prerequisites for the course	In accordance with	the Rulebool	< on the Integrated Studi	es at the School of	Medicine Unive	ersity of Mostar.						
enrolment												
	Week / shift	Тор	pic									
Course	Lectures	L1	Introduction to oncology	. Tumor biology								
content		L2	Tumor etiology. Tumor	epidemiology. Ch	emical, physica	I and biological						
			Prevention and early dia	gnosis of malignar	nt tumors. Psych	osocial aspects						
		of	oncology patients.	0								
		L4 (Cytostatic therapy. Radio	otherapy. Side effe	ects of oncologic	al treatment.						
		L5	Hormonal therapy. Imn	nunotherapy. Oth	er forms of the	erapy: targeted						
		the	rapy, gene therapy, phot grapy	todynamic therapy	/, hyperthermia,	, antiangiogenic						
	Seminars	S1	Breast cancer									
		S2	Lung cancer									

			S3 Skin cancer. Melanoma.												
						S4 Tur	mors of ce	ntral ne	ervous sy	yster	n				
						S5 Gas	strointesti	nal tur	nors (Pa	rt I)					
						S6 He	ad and neo	ck tumo	ors						
						S/ Uro	ogenital ti	umors (Part I)						
						S8 Gas	strointesti	nal tur	nors (Pa	rt II)					
						59 Gyi	necologica	il tumo	rs (Deute II)						
		Буа	reises			510 0	rogenital i	tumors	(Part II)	ation	in oncolor		roach ta	. + h a . a m	
		Exe	rcises			EI-E3	5 Anamne st dependi	sis and	examin tumor lo	ation	n in oncolog	gy. App	Work in	the wa	rd and
							Work in	a dav	hosnita	al (ty	in and diag	cology	theran	/ meth	ods of
						applic	ation). W	ork in	the rac	dioth	erapy depa	artmer	t (proce	ess of i	patient
						prepa	ration for I	radioth	erapy; C	Tsim	nulation, cor	ntourir	ig of tum	or volur	ne and
						organ	s at risk,	prepar	ration o	f rac	diation plar	n and	radiothe	erapy p	rocess,
						brach	yradiother	apy pr	ocess).	Parti	cipation in	multic	disciplina	ny tean	ns and
						oncolo	ogical cou	incils. I	Psychoso	ocial	and nutrit	ional a	approacl	n to on	cology
						patier	nts. Manag	gement	of emer	genc	cy condition	s in on	cology.		
Language		Eng	lish											<u> </u>	
E-learning		Clas	sses are c	conduct	ted live	. It nec	essary, le	ctures	and sem	ninar	s can be co	ombine	ed (live a	and onl	ine) or
Tooching			ching int	nine v	a e-lea	rning pi ctivo, ov	attorms (G	oogie i	vieet) up	5 to r	max of 20%.	•			
methods		Tea	ching, inte	eractiv	e anu a	clive-ex	perientiai.								
methods					T∖	pes of a	assessmen	t (indic	ate - Bo l	ld)					
			Type of p	ore-exa	minatio	on oblig	ation	- (,		Тур	e of exar	n	
midterm	semi	inar	essay/re	/report practical/project task other written oral practi									ctical		
	рар	ber									exam		exam		
		Alloca				ion of ECTS credits and share in the gra					ade				
Stude	ent ob	ligatio	ons	L	earning	g Hours of workload					Share in	n ECTS	SI	nare in g	grade
-				oute	come co	ode						_			
Atte	nding	class	es			50					1.6	0		0%	
				10- N IU- N	AFMSE9)6-2									
				IU- N	/FMSE9	06-3									
Pre-exa	m/Wr	itten	exam	IU- N	/IFMSE9	06-4	5-4 10 0.4							100%	, 5
				IU- N	AFMSE9	06-5									
				10- N IU- N	AFMSE9)6-7									
			In total					60			2			100%	/ D
					Μ	ethod c	of calculati	ng the	final grad	de					
The assess	ment	of th	e written	part of	the tes	t is don	e as follow	/S:							
A = 91-100)% 5 (e	excell	ent)												
B = 79 to 9	0% 4 (very	good)												
C = 67 to 7	8% 3 (good	l)												
D = 55 to 6	06%2	(suffi	cient)												
F = 0.0054	% 1 (Ir	isum	Title		Ed	ition			20011200				Tupo of	litoratur	
(indicate)		(title	author y	(ear)	EU	other	croatian	Anglish		: r In	oultilingual	book	article	script	e other
					OWIT	other	croatian	englisi	i other		nunninguai	DOOK	article	Script	other
Compulsoi	ry Ci	inical	I Onc	Cology,		х		x				х			
	et		tor I Hosk	in Ath											
		dition	nd Peter J Hoskin, 4th												
	Ta	avlor	and F	- Francis											
	G	aylor and Francis													
	W	/ritte	n ma	terials	х			х							х
	pr	ovid	ed by teac	chers											
Additional	KI	inička	a onko	ologija,		х	x			T		х			
	iz	dava	či Vrdol	jak E,											
	Re	alac I	ovasić L K	íusić 7		1	1	1	1				1	1	1

				1							
	Gugić D, Juretić A;										
	2018. by Medicinska										
	naklada										
	Cancer: Principles and		х		х			х			
	Practice of Oncology,										
	editors DeVita VT,										
	Rosenberg SA,										
	Lawrence TS, 11th										
	edition, 2018. by										
	Lippincott Williams										
	and Wilkins;										
	Perez and Brady's		х		х			х			
	Principles and Practice										
	of Radiation Oncology,										
	editors Halperin EC,										
	Perez CA, Brady LW,										
	Waser DE, 7th edition,										
	2018. by Lippincott										
	Williams and Wilkins										
Additional co	ourse information	<u> </u>						<u> </u>	-		
Teaching in C	Clinical Oncology consists o	of 50 ho	ours (5	hours of le	ctures, 10) hours	of seminars a	nd 35 h	ours of o	exercise	s).
Teaching is c	onducted in the form of le	ctures,	semina	ars and exe	ercises du	ring wh	hich the teache	er expla	ains the t	opic and	d
encourages a	active and critical thinking	of the s	student	s and part	icipation	in the d	liscussion. Tea	chers a	ind stude	ents disc	cuss
the specifics	and problems within each	topic c	overed	l. At the se	minars, s	tudents	actively parti	cipate a	and critic	ally disc	cuss
the thematic	unit for which they should	i prepa	are in ac	dvance thr	ough the	prepara	ation of a sem	inar pa	per, in te	eams of	
several stude	ents, in the form of a struct	tured P	owerPo	oint preser	itation.	بريا ام مراد		+:		منابع مر	+ h - a
During the ex	readiather any department of	e neip d	or assis	tants, appi	y the acq	uirea kr	nowledge prac		through	work in	the
clinic, ward, l	radiotherapy department a	anu pa	псрас	ion in muit	laiscipiin	ary tear		gy cou	nciis.		
Attendance	acords are made for each	ctudon	.+								
Attenuance i		studen	ι.								
At the end of	f the class. there is a mand	atorv v	vritten	final exam	with mul	tiple ch	oice of answe	rs (one	of the fi	ve offer	ed
answers is al	ways correct).	,						•			
The assessm	ent of the written part of t	he test	: is don	e as follow	s:						
A = 91-100%	5 (excellent)										
B = 79 to 90%	6 4 (very good)										
C = 67 to 78%	6 3 (good)										
D = 55 to 66%	% 2 (sufficient)										
F = 0 to 54%	1 (insufficient)										

Study	MEDICAL STUDIES	MEDICAL STUDIES IN ENGLISH											
Quelo		Tupo											
Study track	INTEGRATED	Modulo	UNIVERSIT										
Yoar of study	-	Somostor	-										
fear of study		Semester Course code											
Course title		Course code	INIFINISE907										
	OBSTETRICS												
ECTS	11	Status	OBLIGATORY										
	Teaching hours		Lectures	Exercises	Seminars	Practice							
	0		70	70	60	0							
Course	Course objectives	are:											
objectives		_											
	To achieve knowle	edge of the basic	principles of gynecolog	y and obstetrics. E	xpand the kno	wledge and							
	skills necessary to	r understanding t	he pathophysiological r	nechanisms, clinic	cal symptoms, o	differential							
	diagnostic conclus	ions, critical eval	uation of laboratory fin	dings and rational	treatment of t	ine most							
	common gynecoic	igical diseases an	d complications of preg	gnancy.									
-	Learning outcome	(LO)			Course	LO code at							
Course	Student:				learning	the study							
learning			outcome program										
outcomes					code	level							
	Explains and inter	orets the anatom	y of the pelvis and fema	le genital organs	IU- MFMSE907-1	IU-MSE2							
	Presents and inte	rprets the norma	al function of the men	strual cycle and	IU-	IU-MSE2							
	connects the mut	ual physiological	mechanisms by which	, individual organ	MFMSE907-2	IU-MSE3							
	systems participat	e in the hypothal	amus-pituitary-ovary a	xis									
	Critically judges a	nd explains patho	ophysiological mechanis	sms, clinical and	IU-	IU-MSE4							
	laboratory featur	es, treatment a	nd prevention of the	most common	MFMSE907-3	IU-MSE10							
	gynecological dise	ases		- La constituí a constitu									
	Explains and inte	ion and lists mo	dern methods of assist	al conditions in	MFMSE907-4	IU-MSE5							
	technology					IU-MSE10							
	Lists and disting	guishes betweer	n methods of family	planning and	IU-	IU-MSE5							
	contraception, ex	kplains basic ph	iysiological changes a	ind therapeutic	MFMSE907-5								
	options for menor	oausal changes											
	Explains and inter	prets the etiopath	ogenetic mechanisms o	of most common	IU-	IU-MSE2							
	disease in gyneco	logical oncology	, and presents diagnos	stic options and	IVIFIVISE907-0	IU-IVISE10							
	Presents and exp	or therapy	al changes during nor	mal prognancy	11.1-	II I-MSE2							
	childbirth and pue	rperium as well a	as basic events in the ne	ewborn age	MFMSE907-7								
	Critically analyzes	and explains p	athophysiological mech	nanisms, clinical	IU-	IU-MSE4							
	and laboratory fir	dings, treatment	and prevention of the	e most common	MFMSE907-8								
	complications of p	oregnancy, childb	irth and puerperium										
	Lists and classifies	by importance e	emergency conditions i	n obstetrics and	IU-	IU-MSE4							
	recommends a the	erapeutic approa	ch		MIFINISE907-9								
Proroquisitos	In accordance wit	a the Pulebook o	a the Integrated Studies	at the School of I	Medicine Unive	rsity of Mostar							
for the course						i sity of WOStal							
enrolment													
	Week / shift	Торі	C										
Course	Week 1	Intro	duction to the course a	ind historical revie	ew								
content		Pelvi	c and perineum anaton	ny.									
		Gyne	cological-obstetrics pro	opedeutics									
		Ferti	lization and implantatio	on. Embryology	t and the st								
		Early	ulagnosis of pregnai	ncy, Developmen	t and function	n of placenta,							
		Feta	growth and development	ent Restricted an	d accelerated f	etal growth							
		reta	B. Swan and developin	ente nestricieu all		ctar Brownii.							

				Pł	Physiological changes during pregnancy									
	V	Veek 2		Re	epro	ductive physiolo	gy-normal m	enstrual cycle						
				Ar	nten	atal care and mo	onitoring of n	ormal pregnancy	у					
				Di	iabe	tes and pregnan	су							
				Hy	yper	tension in pregr	iancy							
				He	ered	litary diseases a	nd pregnancie	es, biochemical s	screeni	ng t	ests, invasive			
				pr	rena	tal diagnosis								
				Rł	h im	munization and	fetal hydrops.	. Intrahepatic ch	olesta	sis in	pregnancy.			
				Pr	rema	ature labor. Post	term pregna	ncy.						
				М	Iulti	ole pregnancy. N	1etabolism an	d nutrition in pr	regnan	cy.				
	V	Veek 3		Ne	ewb	orn.								
				BI	leed	ing in the second	half of pregr	ancy and during	g delive	ery. E	Blood clotting			
				di	isorc	lers in pregnanc	y and puerper	ium.						
				Ui	rina foct	ry tract infection	ons and TO	RCH during pr	egnano	cy. I	ntraamniotic			
						ochanism of no	rmal labor E	etal surveillance	a in lat	o nr	egnancy and			
				du	uring	g labor				e pi	egnancy and			
				Pł	hysio halgo	ology and patho	logy of the t	hird and fourth	stage	s of	labor. Labor			
				Pi	Jern	erium physiolog	v and patholo	σν						
				Pa	atho	logy of labor (a	nomaly of p	osition and pres	sentati	on.	dystocia, c/p			
				di	disproportion). Obstetrics surgery.									
	V	Veek 4		O	varia	an and fallopian	tube cancer							
				Pr	rema	alignant and mal	ignant disord	ers of the vulva	and va	igina	1			
				Ut	terir	ne cancer								
				Pr	rema	alignant and mal	ignant disord	ers of the cervix						
				At	bnoi	mal (Dysfunctio	nal) uterine b	leeding						
				М	Minimally invasive and major surgical procedures in gynecology,									
				pr	preoperative and postoperative care. Uterine fibroids treatment.									
				М	lisca	rriage and recur	rent miscarria	ige. Trophoblast	tic dise	ase				
	V	Veek 5		Ρι	Puberty and menarche. Pediatric and adolescent gynecology.									
				. E	. Ectopic Pregnancy									
				Fa	Family planning. Contraception.									
				U	Urinary incontinence. Pelvic floor defects.									
				Er	Endometriosis									
				In	flam	nmation of the lo	ower part of t	he genital tract a	and pe	lvic i	nflammatory			
				di	iseas	se								
				Pe	erim	enopause and P	ostemenopau	ise.						
				Ar	men	orrhea and chro	nic anovulatio	on						
				In	rert	nity: alagnosis al	iu treatment.							
Languaga		nalich		Ba	asic	principles of assi	sted reprodu	ctive technology	/					
Eloarning			conduc	tod live. If po		any loctures an	d cominars ca	n ha hald comb	inod (I		nd online) or			
E-learning		omnletely	online	via e-learning	nlat	forms (Google N	Aeet) un to a	maximum of 200	meu (n %	ve a	nu onine) oi			
Teaching	Т	eaching ir	teractiv	ve and active-	-exn	eriential			/0.					
methods			rendern		слр									
				Types of	of as	sessment (indica	ate - Bold)							
		Туре	of pre-e	xamination o	blig	ation	- /	Ту	/pe of e	exam	1			
midterm	semina	r essay/i	report	practica	al/pr	oject task	other	written	ora		practical			
	paper		-	•				exam	exar	n	-			
	Allocatio				f ect	S credits and sh	are in the gra	de						
Student obligations Learning outco code				ning outcome code	outcome Hours of workload Share in ECTS Share			are in grade						
Class attendance and					200 6.6 -			-						
engagement														
Seminar paper					10 0.4 -			-						
Practical exam IU-MFMSE90				MFMSE907-3	10 0.4 - 17-3 10 0.4 -					-				

		IU-N	1FMSE90	7-9									
Pre-exam/V	Vritten exam	IU-N	1FMSE90	7-1		50		1.	6		50%		
		IU-N	1FMSE90	7-2									
		IU-N	1FMSE90	7-3									
		IU-N	1FMSE90	7-7									
Pre-exam,	/Oral exam	IU-N	1FMSE90	7-3		60		2			50%		
		IU-N	1FMSE90	7-4									
		IU-N	1FMSE90	7-5									
		IU-N	1FMSE90	7-6									
		1FMSE90	7-7										
		1FMSE90	7-8										
	In total				330 11 100%								
			Me	thod of	calculating	g the final	grade						
The final grad	e is the average of t	he w	ritten ai	nd oral e	xam grade	s.							
According to	the Rulebook on Stu	dvin	g at the	Universit	ty of Most	ar grades	are ass	igned as follo	ws:				
0-54% insuffic	cient (1):	, ,	,		,	U		0					
55-66% suffic	ient (2):												
67-78% good	(3).												
79- 90% (verv	(3),												
79-90% (very	$g_{000}(4),$												
91-100% exce	ellent (5).								-				
Literature	litle	,	Ed	ition		Language				lype of I	iteratur	e	
(indicate)	(title, author, yea	r)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	Obstetrics and			х		х			х				
	Gynaecology. The												
	Essentials of Clinica	al											
	Care, F. A. Reece a	nd											
	R I Barbieri												
	Stuttgart & New Vo	nrk.											
	Thiomo 2010	лк.											
Additional	Obstateries 2010.												
Additional	Obstetrics. 26			x		x			x				
	Edition. F. Gary												
	Cunningham, et al.												
	Williams. Mc Graw	-											
	Hill Companies, 202	22.											
	Essentials of			х		х			х				
	Obstetrics &												
	Gynecology, 6 th												
	Edition N E Hacker	et											
	al Flsevier 2016												
Additional	urso information		L	I	L	1	L	I	L		I	I	
Additional Co		- 4.4	d a . 1										
Students are	obliged to regularly	atten	id and a	ctively p	articipate i	in all form	ns of cla	sses.	.,				
The evam in (Synacology and Ohd	totric	e ic take	n attar t	ho class ar	nd consist	te ot a w	ritton nracti	cal (nat	iont ovo	minatio	n	

The exam in Gynecology and Obstetrics is taken after the class and consists of a written, practical (patient examination with interpretation) and oral part.

The written exam in Gynecology and Obstetrics is mandatory and qualifying for the oral exam. To pass the exam (grade sufficient), the student must answer 55% of the questions correctly.

The oral part of the exam consists of four different areas: 1. practical obstetrics (delivery and puerperium), 2. perinatology (pregnancy, fetus and the newborn), 3. general gynecology with gynecological oncology and urology, 4. human

reproduction and gynecological endocrinology (four question-card groups).

The final grade is the average of the grade of the written and oral exam.

Study	MEDICAL STUDIES IN ENGLISH									
Cycle		Tupo								
Cycle	INTEGRATED	Type	UNIVERSITY							
Study track	-	Nodule	-							
Year of study	5	Semester	X							
Course title	OTORHINOLARYNGOLOGY	Course	MFMSE1001							
		code								
ECTS	SURGERT	Statuc								
	Tooching hours	Status		reises	Sominars	Practico				
	reaching nours			01303	Seminars	Fractice				
			25	10	10	0				
Course	- To accomplish that the unc	lergraduate	medical student gains adequ	ate knowl	edge about o	auses, clinical				
objectives	features, diagnostics and tre	atment of th	ne pathological conditions of	the ear, n	ose and para	inasal sinuses,				
	oral cavity, pharynx, oesoph	agus, larynx	, trachea, thyroid and parath	yroid gland	ds, major sal	ivary glands,				
	and other regions of the face	ther regions of the face and neck which are an otorhinolaryngologist's area of interest.								
	- To train the medical studer	nt to establis	h diagnosis and provide inde	pendently	first aid and	l basic				
	treatment of some otorhino	laryngologic	al problems at the level of p	imary prac	ctice.					
	- To accomplish that student	gains positi	ve attitudes that are importa	int for com	imunication	with patients,				
	Loarning outcome (LO)	1 the medica	ii neid.	Cour	se learning	LO code at				
Course	Student: outcome code the study									
learning	program level									
outcomes	Describes and explains appli	ed surgical a	natomy of the organs and	IU-MF	MSE1001-1	IU-MSE1				
	regions of the head and nec	regions of the head and neck which are an otorhinolaryngologist's								
	area of interest, and uses this knowledge for understanding of the									
	basics of the ENT surgical procedures.									
	Describes and explains appli bistology and uses this know	ed clinical pl	hysiology, embryology and	IU-IVIF	INISE1001-2	IU-MSE1 IU-MSE5				
	conditions of the head and r	heuge for ex	planation of pathological			IU-MSE6				
	area of interest.									
	Recognizes, describes and us	ses independ	dently specific instruments	IU-MF	MSE1001-3	IU-MSE14				
	and aids for basic diagnostic	procedures	to determine the state of th	e						
	organs of the head and neck	dealing wit	h otorhinolaryngology.							
	Describes and performs inde	ependently r	nanagement of ENT disorder	s IU-MF	MSE1001-4	IU-MSE8				
	at the level required for the	work of a do	octor in primary practice base	ed		IU-MSE10				
	on the acquired knowledge	about etiopa	thogenesis, clinical picture,			IU-MSE14				
	and diagnostics in otorhinola	aryngology.	h - turn fra efta - turn de de e							
	Demonstrates, explains and	carries out t f diseases in	ne transfer of knowledge,	,	IVISE1001-5	IU-MSE20				
	at the level of primary practi	i uiseases ill		<i>'</i>						
	Recognizes and describes EN	IT emergend	ies, performs independently	IU-MF	MSE1001-6	IU-MSE8				
	basic diagnostics, describes	and explains	basic management, and			IU-MSE14				
	provides first aid.					IU-MSE15				
Prerequisites	In accordance with the Rule	book on the	Integrated Studies at the Sch	ool of Med	icine Univer	sity of Mostar.				
for the course										
enronnent	Week / shift	Topic								
Course	lectures	([1]) Int	roduction to FNT & Head a	d neck su	rgery Annlie	ed anatomy of				
content		the ear		.a neek su	. o					
		(L2) Ph	ysiology of hearing. Assessm	ent of hea	ring.					
		(L3) He	aring impairment. Tinnitus.		-					
		(L4) Ph	ysiology of vestibular system	n. Assessn	nent of vest	ibular system.				
		Vestibu	ılar disorders.							
		(L5) Me	énière's disease. Vestibular n	euronitis.	Ear barotrau	ma.				

	(L6) Inflammation of external ear. Inflammation of middle ear.
	Inflammation of inner ear.
	(L7) Complications of otitis. Tumors of the ear and temporal bone.
	(L8) Ear surgery. Cochlear implants.
	(L9) Nose and paranasal sinuses: applied embryology, anatomy,
	physiology. Deformations of the nasal septum and pyramid. Septoplasty,
	rinoplasty.
	(L10) Methods of assessment of the nose and paranasal sinuses.
	Radiologic assessment of the nose and paranasal sinuses. Cutaneous
	lesions of the external nose; surgical treatment. Tumors of the nasal
	cavity, paranasal sinuses end nasopharynx.
	(L11) Injuries of the nose. Foreign bodies in the nose. Inflammation of
	nasal skin.
	(L12) Epistaxis. Infectious rhinitis. Non infectious rhinitis.
	(L13) Acute rhinosinusitis. Chronic rhinosinusitis. Nasal polypi.
	Antrochoanal polyp.
	(L14) The mouth and pharynx: applied anatomy and physiology.
	Waldever ring.
	(L15) Inflammatory diseases of the mouth and pharynx.
	Larvngopharvngeal reflux.
	(116) Complications of tonsillitis.
	(L17) Tonsil problem. Tonsillectomy, adenoidectomy; indications, basic
	principles of surgery.
	(118) Tumors of the mouth and pharynx. Classification of neck lymph
	nodes. Neck dissections.
	(119) Diseases of major salivary glands (sialoadenitis, sialolithiasis,
	tumors). Basic principles of surgical treatment
	(L20) The Jarvnx: applied anatomy and physiology.
	(L21) Inflammations of the larvnx.
	(L22) Tumors of the larynx.
	(L23) Malignant laryngeal tumors: basic principles of surgical treatment.
	Voice and speech rehabilitation following total laryngectomy
	(L24) A neck lump.
	(L25) Surgical treatment of the thyroid and the parathyroid gland
Seminars	(S1) Acute acoustic trauma. Chronic noise trauma.
	(S2) Emergency conditions in rhinology.
	(S3) 1. EP3OS- European Position Paper on the Primary Care Diagnosis
	and Management of Rhinosinusitis and Nasal Polyps. 2. ARIA
	guidelines.
	(S4) Inspiratory stridor: differential diagnosis, treatment. Coniotomy,
	tracheostomy.
	(S5) The European Society for Clinical Microbiology and Infectious
	Diseases: Guideline for the management of acute sore throat.
	(S6) Foreign body in the larynx, trachea, bronchus, and oesophagus.
	(S7) Ear wax. Foreign body in the ear.
	(S8) Congenital anomalies of the larynx.
	(S9) Metastatic neck tumors of unknown primary origin.
	(S10) Esthetic surgery in otorhinolaryngology: auriculoplasty,
	rhytidectomy, blepharoplasty, rhinoplasty.
Exercises (clinical)	(E1) ENT working place. Use of a head mirror and head light.
	(E2) Instruments for head and neck examination.
	(E3) Otoscopy. Ear tollet procedure.
	(E4) Anterior minoscopy.
	(E5) Posterior rninoscopy. Epistaxis: instruments and materials for
	anterior and posterior nasal packing.
	(ED) Uropriaryngoscopy.
	(E7) multer laryingoscopy procedure.
	(E0) Anomnesis in blology, work in the ENT office. (2 hours)
	(E9) Anaminesis in minology, work in the ENT Office. (2 hours)

					(E10) A (E11) N (2 hour (E12) A (E13) A detection (E14) V (E15) U Otomic (E16) W (E17) T trachec (E18) In normal (E19) S microla Work in (E20) N the clin skills, i imagina	namnesis ir leck palpati s) cumetry. H Audiology I on of deafn estibulology Jnit for EN roscopy. /ork in the I fracheal ca ostomy tube maging in I and pathol Specificities ryngoscopy the ENT o fidterm exa ical practica nterpretati ary ENT sce	n pharyi on. Ana earing a Jnit. Pi ess. y Unit. Y T endo: T endo: ENT wa nnula: ENT: UI ogic rac s of th r, rigid perating m - assi als/exer on of p nario). (ngology imnesis aids. Leg ure tor Vestibu scopy. rd and ' types, trasour diograp ne ENT esoph g theate essmen rcises (v olain ra (5 hours)	, work in the in laryngold gal rights of he audiome lometry (cal Rigid and fl Wound Care toilet, char d, X-rays, C hs. operating agoscopy, a er. (5 hours) t of student vritten test, idiographs, s)	e ENT o pgy, wo hearin try. T oric te exible Unit. nge. C T, MF thea and tr s com perfor solvin	office. (2 ork in th g-impai ympanc st, rotat endosc (9hours are of (1. A pro- ter. Eq acheob petencion mance of g a pro-	2 hours) ne ENT c red pati ometry. cional te opes in patient esentati uipmen ronchos es adop of ENT c oblem in	office. ents. Early st). ENT. with on of t for copy. ted in linical n the
Language	Engl	sh			magin		nario). (o nour.	,				
E-learning Teaching	Class be p teac Lect	ses are perfor erformed usi hing via platfoure method/T	med usi ng a hyl orms for eacher-	ng tra brid m e-leai centei	ditional c odel (mi ming (Go red meth	lassroom te x of offline ogle Meet) ods, interae	eaching. and liv up to a ctive/pa	In a ca e onlin maxim articipat	se of need, l e) of teachin um of 20%. ive method	ecture ng or u s, clinio	s and se using or cal teacl	eminars Ily live o ning on	could online the
methods	ward	ls and in the o	linic.	-	<u> </u>	. /							
		Type of pre-	ovamin	Types	of assess	ment (indic	ate - Bo	old)		Type	ofevan	0	
midterm	seminar	essav/	report	Pr	actical/p	roject task	ot	her	written	туре	oral	prac	tical
	paper				71	,			exam		exam		
			Alloca	ition o	f ECTS cr	edits and sł	nare in t	he grac	le				
Stu	dent obliga	tions	Learr	ning οι code	e Hours of workload			Share in ECTS			are in g	rade	
Class atten	dance and	participation					75		2.5			0%	
Seminar wo	ork						10		0.3			0%	
Midterm ex	am - asses	sment of	IU-N	1FMSE1	L001-3		10		0.3				
student's c	ompetenci	es adopted	IU-N	IFMSE1	L001-4								
in the clinic	al practical	s (1. Written	IU-N	IFMSE1	1001-6							0%	
test from E	NI proped	eutics. 2.	in the clinical practicals (1. Written Lest from ENT propedentics 2										
Independent performance of ENT													
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Independer clinical skill plain radiog	nt performa s, 3. Interp graphs, 4. S	ance of ENT retation of olving a											
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Independer clinical skill plain radiog problem in scenario). Pre-exam/F	nt performa s, 3. Interp graphs, 4. S the imagin inal exam	ance of ENT retation of olving a ary ENT	IU-N IU-N IU-N IU-N	1FMSE1 1FMSE1 1FMSE1 1FMSE1 1FMSE1	1001-1 1001-2 1001-4 1001-5 1001-6		85		2.9	1		100%	
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Compulsory	Becker W. Naumann HH.		х	х		х		
,	Pfaltz CR Behrbohm H Far							
	nose and throat diseases							
	with head and neck							
	surgery 3 rd edition							
	Stuttgart New York:							
	Thieme 2009							
Additional	Scholes MA Bamakrishnan		v	v		v		
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	odition Bhiladolphia:							
	Elsovior 2016							
	ESCMIDSoro Throat		Y	X			v	
	ESCIVIDSOLE MICOAL		х	x			x	
	Guideline Group, Peluccii							
	c, Grigoryan L, Galeone C,							
	et al. Guideline for the							
	thus at Clin Missakial							
	throat. Clin Microbiol							
	Infect. 2012; Suppl 1:1-28.							
	Thomas M, Yawn BP, Price		х	х			х	
	D, Lund V, Mullol J,							
	Fokkens W; European							
	Position Paper on							
	Rhinosinusitis and Nasal							
	Polyps Group. EPOS							
	Primary Care Guidelines:							
	European Position Paper							
	on the Primary Care							
	Diagnosis and							
	Management of							
	Rhinosinusitis and Nasal							
	Polyps 2007 - a summary.							
	Prim Care Respir							
	J.2008;17:79-89.							
	Brożek JL, Bousquet J,		х	х			х	
	Agache I, Agarwal A,							
	Bachert C, Bosnic-							
	Anticevich S, et al. Allergic							
	Rhinitis and its Impact on							
	Asthma (ARIA) guidelines-							
	2016 revision. J Allergy Clin							
	Immunol. 2017;140:950-8.							
	- Presentations of lectures	х	x	x				х
	are available to students.							
	- Video presentations of							
	skills performed on							
	education medical models							
	are available to students at							
	the course website							
Additional co	urse information			•	•			

Remarks about classes - The working day starts with lectures, followed by seminars and ends with clinical exercises. At seminar, the student presents an ENT topic or problem. Clinical exercises are coordinated with the lectures, and after the topic is elaborated at the lecture, it should be demonstrated and practiced during the consecutive practical. At special clinical exercises, the student learns about the instruments and devices used to diagnose and treat ENT diseases. The students train first on each other in order to learn how to use safely these tools and comprehend a normal appearance of investigated organs. Afterwards, students use adopted clinical skills to examine the patients. In practices and offices of the Polyclinic and hospital infirmaries, the student assists the specialist or independently performs diagnostic procedures or therapeutic interventions with the supervision and assistance of the ENT specialist. In operating rooms, the student is acquainted with materials, instruments, devices and procedures that are specific to otorhinolaryngology and head and

neck surgery. The students monitor and assist during head and neck surgical procedures, and work independently on primary treatment of minor wounds with specialist supervision.

Midterm exam (written, practical, oral) – The last day of teaching is reserved for an assessment of student's competencies adopted in the clinical exercises. The student:

1. Performs ENT propedeutics written test,

2. Performs independently ENT clinical skills,

3. Interpretates plain radiographs,

4. Solves a problem in the imaginary ENT scenario.

A record in a student dossier is: passed/not passed. The practical part of the exam is recognized during the current academic year.

Regular attendance on clinical exercises (minimum 80%) and passing the midterm practical exam are prerequisite for taking the final exam. Absence from exercises must be compensated. Student missing more than 20% of exercises will have to work at the ENT Polyclinic of the Department of Otorhinolaryngology of the University Hospital in Mostar and approach an exam with a certificate of attendance signed by an ENT specialist. **Final exam:**

- 1st term exam is in the form of written test (54 questions, multiple choices, one correct answer)

GRADE	CORRECT
	ANSWERS
excellent (5 - A)	49 - 54
very good (4 -B)	43 - 48
good (3 - C)	37 – 42
sufficient (2 - D)	30 - 36
insufficient (1-F)	≤ 29

- Next (2nd, 3rd, and 4th term exam) is in the form of oral exam only (a list containing examination questions is available at the course website).

Study	MEDICAL STUDIES IN ENGLISH									
programme		_								
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module	•							
Year of study	5	Semester	X							
Course title	MAXILLOFACIAL SURGERY	Course code	MFMSE1002							
ECTS	1.5	Status	OBLIGATORY							
	Teaching hours		Lectures	Exercises	Seminars	Practice				
	1		8	10	7	0				
Course objectives	To achieve adeque pathological condi neck, which are in To acquire the approxillofacial surge	ate knowledg tions in the are the area of we ppropriate skil ery at the level	e about the causes, cl ea of the face, jaw, oral o ork of the maxillofacial s lls that enable diagnos of general practice.	inical finding, dia cavity, paranasal si curgeon. is, first aid and p	gnosis and trea nuses, large sali roblem solving	tment of most vary glands and in the field of				
Course	Learning outcome Student:	(LO)			Course learning outcome code	LO code at the study program level				
outcomes	Describes and exp the head and neck	Describes and explains the surgical anatomy of the organs and regions of the head and neck IU- IU-MSE1 1 III- III- III-								
	Analyzes the basic explain the pathol	Analyzes the basics of clinical physiology, embryology and histology to explain the pathological conditions of the head and neck region U-MSE1002-2 U-MSE1002-2								
	Performs diagnostics and treatment at the level required for the work of a doctor of medicine in general practice IU- 3 IU-MSE6									
	Uses specific instruments for basic diagnostic procedures in the head and neck region IU-MSE10 IU-MSE11									
	Diagnoses and pro neck region, espe injuries	ovides first aid ecially facial a	in emergency situations ind jaw bone fractures	of the head and and soft tissue	IU- MFMSE1002- 5	IU-MSE10 IU-MSE11				
Prerequisites for the course	In accordance with	the Rulebook	on the Integrated Studi	es at the School of	Medicine Unive	rsity of Mostar.				
emonnent	Week / shift	Tor	nic							
Course content	lectures	L1	ntroduction to the maxi	llofacial surgery						
		L2 I	ntroduction to the dent	al medicine						
		L3 F	Facial bones traumatolo	gy						
		L4 F	Facial and jaw deformition	es						
		L5 H	Head and neck tumors	d and neak region						
			Malformations of the he	ad and neck						
		18 6	Plastic and reconstructiv	e surgery of the h	ead and neck					
	seminars	S1 (Classification of the skin	flaps						
		S2 I	Reconstruction and aest	hetic surgery of th	e head and nec	k				
		S3 (Odontogenic inflammati	ons - principles of	treatment					
		S4 (Osteosynthesis of the m	andible and maxill	a – principles of	treatment				
			Neck dissections - classif	ication						
		50 (Preoperative planning in	the orthognathic	surgerv					
	exercises	E1 (Clinical examination of t	he patient	2019011					
		E2 9	Suturing materials - basi	c division						
		E3 9	Suturing the wound on t	he model						
		E4 I	IMF setting							
		E5 (Usteosynthesis of the lo	wer jaw idface						
		E3 5 E4 I E5 0	E3 Suturing the wound on the model E4 IMF setting E5 Osteosynthesis of the lower jaw							
		E6 (Osteosynthesis of the m	idface						

Language E-learning English E-learning Classes are conducted live. If necessary, lectures and seminars can be combined (live and online) or completely online via elearning platforms (Google Meet) up to a maximum of 20%. Teaching lectures, interactive and clinical-experiential. Type of examination obligation Type of examination obligation midterm seminar essary/report practical/project task other written oral practical/project task Student obligations Learning noutcome code IV-MFMS51002-3 5 0,1 0% attending classes U-MFMS51002-3 5 0,1 0% 100% Pre-exam /final exam IV-MFMS51002-3 5 0,1 0% 100% IV-MFMS51002-3 15 0,5 100% 100% 100% 100% Pre-exam /final exam IV-MFMS51002-3 15 0,5 100% 100% IV-MFMS51002-3 15 0,5 100% 100% 100% 100% 100% IV-MFMS51002-3 15 0,5 100% 100% 100% 100%				English				E7 Local flaps in the head and neck region E8 Postoperative patient care E9 X-ray analysis in the facial bone fractures E10 Dental models, clinical photographs and x-rays analysis in the head and neck deformities								
Elearning Classes are conducted live. If necessary, lectures and seminars can be combined (live and online) or completely online via e-learning platforms (Google Meet) up to a maximum of 20%. Teaching methods Tage in e-learning platforms (Google Meet) up to a maximum of 20%. midterm seminar essary/report Type of examination obligation Type of examination midterm seminar essary/report practical/project task other written exam Student obligations Learning Hours of workload Share in ECTS Share in grade attending classes U-MFMSE1002-3 5 0,1 0% midterm IU-MFMSE1002-3 5 0,1 0% midterm IU-MFMSE1002-3 5 0,5 100% Pre-exam /final exam IU-MFMSE1002-3 15 0,5 100% The final grade is obtained on the basis of the final written or oral exam. A detailed description is it e additional information about the subject. Type of Iterature Clindicate // Walking at Ureak X X X X Iterature Method of calculating the final grade Sochan the basis of the final written or oral exam. A detailed description is intering atrice iscript other <td< td=""><td>Language</td><td></td><td>Englis</td><td>sh</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Language		Englis	sh												
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term/first exam term) is conducted exclusively by written test (30 questions, multiple choice, one correct answer). EVALUATION POINTS Excellent (5) 28-30 Very good (4) 25-27 Good (3) 20-24 Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The	of performin	ng clin		kills - int	terpreta	ition o	t patie	ent findings	(radiolog	ical, lab	oratory, path	onistoic	ogical).	Participa m (proli	tion in	
EVALUATION POINTS Excellent (5) 28-30 Very good (4) 25-27 Good (3) 20-24 Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The	term/first ex	innunn vam te	00%) arm\i	s conduc	stad ave	e miu-		ritton tost (20 quest	ions m	utiple choice		rroct an	iii (preiii	minary	
Excellent (5) 28-30 Very good (4) 25-27 Good (3) 20-24 Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The	terny inst ex			s conduc F		TION F		S S S S S S S S S S S S S S S S S S S	50 quest	10115, 1110	intiple choice,		inect an	30001).		
Very good (4) 25-27 Good (3) 20-24 Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The				-	Exceller	nt (5)	28-3	30								
Good (3) 20-24 Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The				,	Very go	od (4)	25-2	<u>2</u> 7								
Sufficient (2) 17-19 Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The					Good	(3)	20-2	24								
Insufficient (1) 0-16 All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The				:	Sufficie	nt (2)	17-	19								
All subsequent deadlines for students who did not take the exam, did not pass the exam or want a higher grade is oral. The				I	Insuffici	ient (1) 0-1	.6								
exam consists of 4 questions (traumatology, malformations and deformities, tumors, inflammatory diseases of the head and	All subseque	ent de ts of 4	adline	es for stu tions (tra	udents v aumato	who di logv. n	d not t nalforr	take the exa mations and	m, did no deformit	ot pass t ties, tum	he exam or w ors. inflamm	ant a hi atorv di	igher gr seases (ade is or of the he	al. The ad and	
neck).	neck).			•		017					•	,				

programmeCycleINStudy track-Year of study5Course titleOIYECTS5.Teat	PHTHALMOLOG	Type Module Semester Course code	UNIVERSITY - X MEMSE1003								
CycleINStudy track-Year of study5Course titleOIYECTS5.Teat	ITEGRATED PHTHALMOLOG	Type Module Semester Course code	UNIVERSITY - X MEMSE1003								
Study track-Year of study5Course titleOIYYECTS5.Tea	PHTHALMOLOG	Module Semester Course code	- X MEMSE1003								
Year of study 5 Course title OI Y ECTS 5. Tea	PHTHALMOLOG	Semester Course code	X MEMSE1003								
Course title OI Y ECTS 5. Tea	PHTHALMOLOG	Course code	MEMSE1003	^							
Y ECTS 5. Tea	5	code									
ECTS 5.	5										
Теа	•	Status	OBLIGATORY								
	aching hours		Lectures	Exercises	Seminars	Practice					
			20	30	15	-					
Course Th	ne goals of this cou	irse are:			•						
objectives -to	o extend student's	knowledge a	edge about the structure and function of the healthy eye								
-to	o train the student	s in recognit	cognition of frequent disorders and diseases of the eye, as well as enable them								
to	perform the basic	clinical exar	nination and diagnostic	procedures							
-to	o achieve student's	s understand	ling about basic principl	es of treatment in	ophthalmology						
Le	earning outcome (L	.0)			Course	LO code at the					
Course					learning	study program					
learning	acaribas the basies	of anatomi	al and functional factu	urac of the vision	outcome code						
outcomes	organ MFMSE1003-1										
Ar	Analyses the structural and functional disorders of the eve and connects IU-										
th	them with the first signs and symptoms of the disease MFMSE1003-2										
De	escribes different	causes of	f eye diseases (gene	etic, metabolic,	IU-	IU-MSE5					
au	utoimmune, deger	nerative, an	d microbiological) and	interprets the	MFMSE1003-3						
m	mechanism of their effect on the eye and visual function										
Co	onnects and appli	ies the know	wledge about clinical,	laboratory and	IU-	IU-MSE8					
im	naging features of	an eye disea	se and performs different	ential diagnostic	MFMSE1003-4						
co	onsiderations and o	conclusions									
Ta	akes the complete	history and p	performs basic clinical e	xamination of	IU-	IU-MSE14					
or	phthalmological pa	itient, integra	ates obtained information	on in	IVIFIVISE1003-5						
es	stablishing current	diagnosis an	a suggests treatment of	ptions							
Deserve visites a la		h a Dulah a ali	and the last a material Church	ing at the Cale of a		a u a ita a a f					
for the course M	l accordance with t	пе кијероок	on the integrated Stud	les at the School o	t Medicine Univ	ersity of					
enrolment	IUSLAI.										
	look / shift	Toni	c								
content Le		l 1 lr	troduction to onbthalm	ology anatomy a	nd physiology o	f the eve					
		L2 Sv	vmptoms, clinical exami	ination, and diagno	ostic procedures	in					
		opht	thalmology	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
		L3 T	he refraction of the eye								
		L4 Ev	yelids and lacrimal syste	em							
		L5 O	rbit								
		L6 C	onjunctiva								
		L7 C	ornea and sclera								
		L8 Uvea									
				L9 Lens							
		L9 Le	ens								
		L9 L0	ens Glaucoma Neuro antiticatura d								
		L9 L9 L10 L11	ens Glaucoma Neuroophthalmology Rodiatria arbthalmology								
		L9 L6 L10 L11 L12	ens Glaucoma Neuroophthalmology Pediatric ophthalmolog Vascular disordors of th	y e rotina							
		L9 L6 L10 L11 L12 L13	ens Glaucoma Neuroophthalmology Pediatric ophthalmolog Vascular disorders of th Vitreous body and dege	y e retina nerative retinal di	503505						
		L9 L6 L10 L11 L12 L13 L14	ens Glaucoma Neuroophthalmology Pediatric ophthalmolog Vascular disorders of th Vitreous body and dege Macula	y e retina nerative retinal dis	seases						
Course W content Le	nechanism of their effect on the eye and visual function IU- IU-MSE8 Connects and applies the knowledge about clinical, laboratory and maging features of an eye disease and performs differential diagnostic MFMSE1003-4 IU-MSE8 Scansiderations and conclusions IU- IU-MSE8 IU-MSE8 Fakes the complete history and performs basic clinical examination of ophthalmological patient, integrates obtained information in establishing current diagnosis and suggests treatment options IU- IU-MSE14 n accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Vostar. Neek / shift Topic Lectures L1 Introduction to ophthalmology, anatomy, and physiology of the eye L2 Symptoms, clinical examination, and diagnostic procedures in ophthalmology IJ The refraction of the eye										

			L17 O	L17 Ocular trauma							
			L18 E	mergencies in o	phthalmology	/					
			L19 O	cular manifesta	tions of the s	ystemic disease	es				
			L20 V	isual rehabilitat	ion						
	Exercises		E1 H	istory and clinic	al examinatio	n in ophthalmo	ology				
			E2 C	orrection of the	refractive er	rors, slit lamp e	xaminatio	ו			
			E3 SI	it lamp examination	ation, corneal	tests and tear	film tests				
			E4 SI	it lamp examination	ation, diagnos	tic procedures	in glaucon	na patients			
			E5 O	phthalmologica	l examination	in children					
			E6 V	isual field-perin	netry, pupillar	y reactions, opl	hthalmolo	бсору			
			E/ 0	phthalmolosco	oy, OCT, FA, C	olor vision					
				phthalmolosco	py, OCT, FA, U	itrasound of the	e eye				
			E9 31	aboratory and r	ation, opininal adiological pr	acedures in on	hthalmolo	TV/			
				S1 Petractive errors							
	Seminars		SI R	S1 Refractive errors S2 Dry eye - epiphora							
			S3 0	S3 Orbital diseases							
			S4 C	S4 Conjunctivitis-keratitis							
			S5 C	ornea-transplar	tation and re	fractive surgery	/				
			S6 Sp	pecific immune	reaction of th	e eye					
			S7 U	veitis-endophth	almitis						
			S8 Ca	ataract							
			S9 A	cute attack of a	ngle closure a	nd neovascular	glaucoma				
			S10 (S10 Optic neuritis-Optic neuropathy							
			S11 S	S11 Stradisinus and ambiyopia S12 Retinopathy-maculopathy							
			512	Retinopathy-ma	iculopathy						
			S13 3	Differential diag	nosis of the r	ed eve	lology				
			S14	Differential diag	nosis of visua	l impairment					
Language	English		515		10313 01 11308	ininpairment					
E-learning	Classes are	conducted in	person (li	ve). If necessary	, lectures and	seminars can b	e combine	d (live and online)			
	or complet	ely online via	e-learning	earning platforms (Google Meet) up to max 20%.							
Teaching	Teaching, ii	nteractive and	active-ex	xperiential.							
methods											
			Types o	f assessment (ir	ndicate - Bold						
	Туре с	of pre-examina	tion obli	gation			Type of e	kam			
midterm	seminar	essay/	pract	ical/project	other	written	oral	practical			
	paper	report		task		exam	exam				
	1	Alloc	ation of I	ECTS credits and	d share in the	grade		<u>cl</u>			
Student of	oligations	Learning o	utcome e	Hours of V	vorkload	Share in EC	.15	Share in grade			
Attending	g classes			65	5	2.1					
Pre-exam/W	ritten exam	IU-MFMS	1003-1	45	5	1.5		50%			
		IU-MFMS	1003-2								
		IU-MFMS	1003-3								
		IU-MFMSI	1003-4								
Seminar	naner	IU-MFMSF	1003-2	11	5	0.5		0%			
Serima	Pape,	IU-MFMSE	1003-3		-	0.5		570			
Pre-exam/	Oral exam	IU-MFMS	1003-2	40)	1.4		50%			
· ·		IU-MFMS	1003-3								
		IU-MFMSI	1003-4	03-4							
	IU-MFMSE1				-			1000/			
	in tota		Mother	105 5.5 100%							
			iviethoo	i oi calculating t	ne mai grade						

The final grade is calculated as the arithmetic mean of the grades obtained on the written and oral parts of the exam, that is: (Written + Oral)/2.

Literature	Title	Ed	ition			Type of literature					
(indicate)	(title, author, year)	own	other	Croatian	English	other	multilingual	book	article	script	other
Compulsor y	Ophthalmology, G.K. Lang, Thieme, 2016.		x		x			x			
Additional	Lecture notes	х			х						х
Additional cou	Additional course information										

Teaching:

The course is taken over 65 hours or 2 weeks and consists of 15 teaching units. Each unit has 1-2 hours of lectures, 1 hour of seminars for verification and determination of the knowledge and 2 hours of exercises with assistants for practical application of acquired knowledge during the examination of ophthalmological patients. At seminars students will actively participate and discuss about given thematic unit, for which they have to be prepared through the seminar presentation. They will be divided in groups of 3-5 students and required to make their presentation in PowerPoint module.

Written exam

The written exam will be held in pre-exam after ophthalmology lectures have been done. It contains 50 questions with multiple choice of answers (only one of them is correct). To pass the exam (grade sufficient), the student must answer 55% of the questions correctly, i.e., must obtain at least 28 points.

According to the Rulebook on studying at the University of Mostar, grades are assigned as follows:

0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90% (very good 4);

91-100% excellent (5).

Pre-exam is to be held several days after the last day of classes.

Oral exam contains the most important parts of ophthalmology. Through 3-4 questions the integrative knowledge will be tested, which is important for understanding a whole unit of lectures and is a sufficient basis for medical practice. Condition for accession to oral exam is: that student has successfully passed written exam and has participated in the seminar production.

Final evaluation is calculated as arithmetic mean of the grades obtained in the written and oral exam, respectively: (W+O)/2.

Study	MEDICAL STUDIES IN ENGLISH										
Cycle		Туре									
Cycle Study track	INTEGRATED	Nedule	UNIVERSITY								
Study track	- r	Nodule	-								
Year of study	5	Semester	X								
Course title	ORTHOPAEDICS	Course	MFMSE1004								
		code									
FCTS	6	Status									
	Teaching hours	Status		Evercises	ç	Sominars	Practice				
	reaching nours		20	40	3	15	0				
Course	To enable the stude	ents to learn a	bout congenital and dev	elopmental d	lisease	s of the locom	otor system,				
objectives	inflammatory and d	egenerative of	diseases, circulatory disea	ases, tumors,	injurie	s, amputatior	is and				
	prosthetics, joint ar	throplasty.			•						
	The classes cover th	ie knowledge	ledge in basic medical subjects with emphasis on functional anatomy of the								
	locomotor system.										
	Furthermore, they o	cover the acq	uired knowledge in clinic	al subjects, e	specia	lly internal me	dicine with				
	emphasis on clinica	l immunology	and rheumatology, neur	rology and pa	artly pa	ediatrics.	III and at the				
Course	Learning outcome (LO)	outcome code study program								
learning	Student.				0.00		level				
outcomes	Understands anator system.	omy, function and biomechanics of osteomuscular IU-MFMSE1004-1 IU-MSE2									
	Learns and comprel diseases of osteom	hends main d uscular syster	iagnostic procedures of in n.	njuries and	IU-MF	MSE1004-2	IU-MSE8				
	Describes and expla	Describes and explains the basics of orthopedic diseases as well as									
	injuries, etiology, clinical features, diagnostics and treatment of IU-MFMSE1004-3 IU-MSE8										
	orthopedic patients.										
	Acquires and demo procedures.	nstrates the s	kills in diagnostic and the	erapeutic	IU-MF	MSE1004-4	IU-MSE8				
	Describes and appli	es the preven	tive measures in a timely	y manner.	IU-MF	MSE1004-5	IU-MSE10				
Prerequisites	In accordance with	the Rulebook	on the Integrated Studie	es at the Scho	ol of N	ledicine Unive	rsity of Mostar.				
enrolment											
	Week / shift	Торі	с								
Course	Teaching units	(T1)	Introduction – orthoped	ics through h	istory,	morphology a	nd function of				
content	0	LMS	, clinical features and me	ethods of trea	tment						
		Orth	opedic procedures in gei	neral (conserv	vative	and surgical).					
		Orth	opedic examination, rad	iology diagno	ostics.						
		Wor	king at the clinic and dep	partment.							
		Wor	king in the operating roo	om							
		(T2)	General disorders of mus	scle-skeletal s	system						
		Bone	e dysplasions – achondro	plasia, muco	polysa	ccharidosis, os	teogenesis				
		Impe	erfecta, arthrogryposis, n	netabolic and	horm	onal diseases -	– osteoporosis,				
		Page	et disease, gout, rickets.			lia a val a va a va al					
		(13)	Juvenile osteochondrosis	s, bone circul	ation c	isorders and	ations				
		Clini	riyseaij apupiiysedi USSIII cal cases — iuvenile ostec	cation uisora	ers. PO asentic	femur head n	acions. Jecrosis				
		(TA)	Bones and joints of the la	ower limh – r	pelvis a	nd hin					
			enerative joint diseases			p.					
		(T5)	(T5) Clinical cases – degenerative joint diseases, osteoarthritis, intervertebral								
		disc	disc hernia.								
		(T6)	Inflammatory diseases o	f the musce-s	skeleta	l system – spe	cific and				
		nons	specific osteomyelitis, inf	fective arthrit	is, rhe	umatoid arthri	itis.				
		(T7)	Scoliosis. Orthopedic tec	hnique. Cong	genital	hip dislocatior	n – diagnosis				
		and	treatment. Plaster – cons	servative trea	atment	. Tumors of th	e				

	musculosceletal system. Palsies. Sympathetic reflex dystrophy – Sudeck disease.									
				(T8) Ve	rtebral colum	n – congenital	and developme	ental dise	orders	5.
				Thorax						
				(T9) Sh	oulder girdle. /	Arm. n and unner le	a arthroplast	u oninh	vcoolie	sic of formaral
				head.	eivic girule. Hi	p and upper le	g – arthropiast	y, epipin	yseons	sis of remoral
				Legg-Ca	alve-Perthes d	sease. Knee.				
				(T11) L	ower leg, foot.	Canalicular sy	ndromes. Imm	obilizati	on of l	bone
				fractur	es. Osteosynth	etic materials.	Fracture reduc	ction. M	onitor	ing of
				treater	nent of fractur	es and luxatio	ns - iniumed neme	-		
				(112) If Basic n	rinciples of fra	approach to th ctures and frai	e injured perso	n. LIVIS I Dent and	njurie: Lioint	s în general.
				luxatio	ns. Clinical cas	es – surgical ar	nd conservative	e manag	ement	t of bone
				fractur	es and joint lux	kations.		0		
				(T13) L	MS injuries in o	children. Verte	bral column, tł	iorax an	d pelv	is injuries.
				Clinical	features of LN	/IS injuries in c	hildren.			
				(T15) U	Ipper limb frac	tures. Pseudoa tures	arthrosis.			
Language	Englis	h		1 (113) 0		tui co.				
E-learning	Class or ful	es are h ly onlin	neld in persor e over the E-	n. If neede learning p	ed, lectures and latforms (Goos	d seminars car gle Meet) up to	be held comb max of 20%.	ined (in	perso	n and online)
Teaching	Lectu	ring, in	teractive and	experience	ce based.	· ·				
methods										
Type of pre-examination obligation										
midterm	Print essay/report practical/project task other written oral practical									
	paper	2350	,,,,epore	practically		other	exam	exa	m	practical
	Allocation of ECTS credits and share in the grade									
Student o	bligatior	ıs	Learning o	utcome e	Hours of	workload	Share in E	CTS	Sha	are in grade
Class atter	ndance a	nd		-	7	c	2 5			0.9/
partici	pation				/	5	2.5			0 %
Semina	r paper		IU-MFMSE1004-3		1	0	0.3			0 %
Pre-exam/W	/ritten e	xam	IU-MFMSE10)04-1)04-2	4	0	1.3			50 %
Pre-exam/Pr	actical e	xam	IU-MFMSE1)04-4)04-5	1	5	0.5			0 %
			IU-MFMSE10)04-1						
Pre-exam/	'Oral exa	m	IU-MFMSE10	04-2	4	0	1.4			50%
i i c chaini	erar exa		IU-MFMSE10)04-3)04 5		•				30/0
		n total	10-IVIFIVISE1	104-5	18	30	6			100%
				Method o	of calculating t	he final grade				
Orthopedic su	rgery an	d traun	natology exar	n consists	of three parts	: written, prac	tical and oral ex	kam.		
		-f F 0 -	مناطنها ماممنه			a number of a			:	wadad aa
following:	consists	of 50 n	nuitipie-choic	e questio	ns. Based on tr	ie number of c	orrect answers	the exa	am is g	graded as
45-50 points =	grade 5									
40-44 points =	grade 4									
35-39 points =	grade 3									
30-34 points =	grade 2		معاجا مائما مم				+			
retaken	Once passed, the written exam is valid throughout the full academic year and that part of the course won't have to be									
In the practica	l exam, s	student	t is assigned o	ne patien	t at the Ortho	pedic surgery o	linic. The stude	ent has t	o exar	mine the
patient and su	iggest tre	eatmen	t. The practic	al exam is	graded either	as a pass or fa	il.			
Oral exam is ta	aken afte	er passi	ng the practi	cal exam.	In an oral exan	n student draw	s 4 cards with	question	ns divi	ded in the
same number	of categ	ories. S	tudent needs	to demoi	nstrate the bas	ic knowledge	in all drawn top	oics in or	rder to	pass the
exam.	exam.									

The final grade is the average of grades obtained in written and oral exam. Students are able to take the exam in regular summer and autumn exam periods.											
Literature	Title	Edition		Language				Type of literature			
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Blom A, Warwick D, Whitehouse M: Apley & Solomon's System of Orthopaedics and Trauma, CRC Press, 2017.		X		X			X			
Additional	Canale et al: Campbell's Operative Orthopaedics, Elsevier, 2016		x		x			x			
Additional course information											
Course quality assessment:											
 Quality analysis from students and teachers Analysis of exam results Report of office for teaching control External evaluation (visit of quality control team) 											

Study	MEDICAL STUDIES IN ENGLISH																
programme																	
Cycle	INTEGRATED	Туре	UNIVERSITY														
Study track	-	Module	-														
Year of study	5	Semester	Х														
Course title	PHYSICAL AND	Course	MFMSE1005														
	REHABILITATION	code															
FCTS		Status															
	Zeaching hours	Status	lectures Exercises Seminars Practice														
	reaching nours		10	20	10	0											
Course	- Acquisitic	on of basic know	c knowledge and skills in the fields of medical history, clinical examination.														
objectives	diagnostics and treatment in physical and rehabilitation medicine																
,	 Understanding the basic principles of rehabilitation in modern society, with special reference 																
	the impo	the importance of the biopsychosocial approach in teamwork in the rehabilitation process															
		(, -)															
Course	Learning outcome	(LO)		Course	LO code												
learning	Student.					study											
outcomes																	
		lev															
	Explains the role, relationship and basic principles, and applies the procedures of physical medicine and rehabilitation in the treatment ofIU- MFMSE1005-1IU-MSE1 IU-MSE2																
	patients.	orontiatos roba	abilitation categories acc	ording to Morld													
	Analyses and differentiates renabilitation categories according to World 10- Health Organization criteria																
	Independently de	monstrates tal	king a medical history a	nd performing a	IU-	IU-MSE6											
	clinical examinati	ion using the	physiatry-rheumatolog	y propaedeutics	MFMSE1005-3	IU-MSE10											
	principles.	principles.															
	Creates a reh	abilitation ap	oproach, recognizes i	IU-	IU-MSE6												
	contraindications	for physical the	erapy.	IVIFIVISE1005-4	IU-MSE11												
	Presents the bas	ic modalities	odalities of diagnosis and treatment in physical IU-														
	rehabilitation med	licine, recogniz	e, recognizes the importance of the biopsychosocial MFMSE1005-5 IU-MS														
	approach in the pr	ocessing and t	essing and treatment of patients.														
Droroquisitos	In accordance with	the Bulebook	on the Integrated Studies	at the School of M	Indicina Universit	v of Mostor											
for the course	In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Mostar.																
enrolment																	
	Week / shift	Торі	с														
Course	Lectures	(L1)	 Introduction to physical 	l medicine and reh	abilitation. The re	ole and											
content		signi	ficance of rehabilitation.	Determining the g	oal and rehabilita	ition plan.											
		(L2)	 Principles and forms of 	rehabilitation of t	he locomotor syst	em											
		disea	diseases and injuries. Rehabilitation after placement of artificial joints.														
		(LS) = Types of physical therapy procedures in treatment(LA) = Deformities of the spine. Hin deformities. Physical therapy															
		elect	electrotherapy.														
		(L5) – Principles and forms of rehabilitation of diseases and injuries of the															
		cent	central and peripheral motor neuron (L6) – Habilitation and rehabilitation of children with cerebral damage.														
		(L6)															
		Boba	atn therapy.	with limb amout	ations												
		(L/) (L2)	(L/) – Rehabilitation of people with limb amputations														
		 (L8) – Principles and forms of renabilitation of inflammatory rneumatic diseases and degenerative joint diseases minars (S1) – Orthoses and orthotics 															
	Seminars																
		(S2)	 (S2) – Amputations and prosthetics. Principles of amputee rehabilitation (S3) – Rehabilitation principles in musculoskeletal injuries 														
		(S3)															
	(S4) – Functional anatomy of walking and posture																
							(S5) – Pharmacological and non-pharmacological methods of treatment and										
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	-		•			rehab											
		Exer	rcises			(E1) -	Types of p	hysical th	herapy ar	nd the	er applica	ation					
						(E2) -	Renabilita	tion of cr	ildren w	ith sp	ecial nee	ds					
						(E3) -	Renabilita	tion of cr	niaren w	ith ce	rebrai da	image	onto				
						(64) -	Renabilitat		tiontowi		rneuma			dlacama	tor		
						(ED) -	Refiduillat m trauma	ion oi pa	tients wi	th de	generativ	e uisea	ises an		lor		
		Engl	lich			syster	ii tiauiiia										
E-learning		If ne	ressarv	lecture	es and s	eminar	s can he he	ld online	(with Go	ngle	Meet an	olicatio	n) un te	n max of	20%		
Teaching		Tead	ching met	hods	narticin	atory a	nd interact	ive meth	ods	Jogic	vicci app	Jilcutio	<u>n) up t</u>		2070.		
methods					par croip				00.01								
					Τy	pes of	assessment	t (indicat	e - Bold)								
			Type o	f pre-e	examina	tion ob	ligation		,			Тур	e of ex	am			
midterm	semi	nar	essay/re	epor	pr	actical/	other		written ora			prac	tical				
	рар	er	t	•							exar	n	exam	xam			
		Allocati				on of E	on of ECTS credits and share in the grade										
Stude	nt obli	igatic	ons		Learning	g	Hours of workload				Share	e in ECT	S	Share in	grade		
				out	come c	ode											
At	ttenda	ance						40				1.3		5 %	,)		
Pre-exan	n/Prac	ctical exam IU-MFMSE10				05-3		6				0.2		10 %	6		
				IU-N	1FMSE10	05-1											
Pre-ex	am/Oi	ral exam				05-2	14				0.5			85 %			
				IU-N	1FIVISE10	05-5											
		1	n total					60				2		100	%		
					M	lethod	of calculati	ng the fin	al grade						·		
The final g	rade is	the	sum of =	attenc	lance 5	% + pra	ctical exam	10 % + 1	final oral	exam	85 %. D	etails a	re expl	ained bel	low in		
additional	course	e info	rmation.			·											
According	to the	Rule	book on s	tudyir	ng at the	e Unive	rsity of Mos	star, the	final grac	le is a	ssigned a	as follo	NS:				
0-54%, inst	ufficier	nt (1)	;														
55-66%, su	fficien	t (2);															
67-78%, go	od (3)	;															
79-90%, ve	ery goo	od (4);														
91-100%, e	excelle	nt (5)). 									_		1			
Literature (indicato)		(+;+ _0	litle	(oor)	Ed	tion	Cualian	La	nguage		· · · · · · · · · · · · · · · · · · ·	la a a la	ype of	literatur	e		
(inuicate)		(uue,	autior, y	/ear)	own	otner	Croatian	English	otner	muit	llingual	роок	article	script	otn.		
Compulsor	y C	amei	ron M.H.			х		x				х					
	P	nysic	al Agents	in Free													
	R	ehab	ilitation.	From													
	K	esea	rch to														
	P f	actio	ce,														
		lcovia	ar Saunde	orc													
	2	013	Missouri	., .,													
Additional	5	ivan I	M Phillir)S		x		×				x		1			
	N	И., Ва	igulev I. I	Nott													
	Ν	л. Ох	ford														
	h	handbook of															
	re	ehabi	ilitation														
	n	edicine. Oxford															
	U	Inive	niversity Press,														
	2	019.	New York	<													
Additional	course	e info	rmation														

 Teaching is conducted in the form of lectures, seminars and exercises. Lectures and seminars are held at the School of Medicine of the University of Mostar, while exercises are conducted at the Clinic for Physical Medicine and Rehabilitation and the Clinic for Children's Diseases of the University Clinical Hospital Mostar. Students are mandatory to regularly attend and participate in lectures, seminars and exercises. Attendance at all classes is checked. Attendance at classes (lectures, seminars, exercises) will be evaluated with a maximum of 5 points. 5 points - 100% attendance at all classes (lectures, seminars, exercises) 4.25 points - one absence from any form of teaching
3.5 points - two absences 2.75 points - three absences
0 points - four absences
The final exam consists of a practical and theoretical part.
Practical part of the exam is practical examination with a patient. The practical part of the exam is worth 10 points. Passing the practical part of the exam is a condition for accessing the theoretical part of the final exam, and as such is valid for the entire academic year. 10 points - excellent (5) 8.5 points - very good (4) 7.0 points - good (3) 5.5 points - sufficient (2) 0 points - insufficient (1)
The oral theoretical part of the exam includes a test of knowledge from the entire material and the ability to conclude and connect the theoretical knowledge as a whole. It is evaluated with 85 points. 85 points - excellent (5) 72.25 points - very good (4) 59.5 points - good (3) 46.75 points - sufficient (2) 0 points - insufficient (1)

Study	MEDICAL STUDIES IN ENGLISH													
programme		Tupo												
Cycle Study track	INTEGRATED	Nodulo	UNIVERSIT											
Yoar of study	-	Somostor	- ×											
Course title		Course												
Course title	AND	code	WFWISE1000											
	OCCUPATIONAL	couc												
	HEALTH													
ECTS	3	Status	OBLIGATORY											
	Teaching hours		Lectures Exercises	Seminars	Practice									
	-		20 20	20	-									
objectives	the immediate livin effects and tempor- negatively affect hu the basics of health nutritional supplem environmental facto psychology, studen health and occupat part of clinical med assessment of work	ffects and temporary or permanent consequences of exposure, including emergency situations that can egatively affect human health. To acquaint students with global health and environmental problems, he basics of health aspects of urbanization and housing, the public health significance of nutrition, utritional supplements, laboratory testing and monitoring, methods of monitoring exposure to harmful nvironmental factors and assessment of health effects. Through the basics of work physiology and isychology, students will expand their knowledge in these areas and acquire basic skills in occupational health and occupational health protection. Knowledge of the field of occupational health also includes a part of clinical medicine, and students will be trained to apply the acquired clinical knowledge in the seesment of work ability, and will expand their knowledge in the differential diagnosis of health lisorders and determining the etiology of the clinical presentation of the disease, as well as to recognize												
	disorders and deter detect early, and pr	disorders and determining the etiology of the clinical presentation of the disease, as well as to recognize, detect early, and prevent diseases caused or aggravated by work and exposure to harmful												
	environmental facto	ors.		Course	LO code at the									
Course learning	Student:	10)		learning outcome code	study program level									
outcomes	Assesses the advers and work methods;	se health effec	ts of environmental factors, condition	5 IU- MFMSE1006- 1	IU-MSE5									
	Explains the cause diseases, work-rela conditions importa or permanent incap	s and prevent ted diseases, a nt for the mor pacity for work	ion of injuries at work, occupationand other acute or chronic diseases an pidity of workers that cause temporar	IU- MFMSE1006- , 2	IU-MSE8									
	Participates in the applying acquired k	e work of mu nowledge and	ltidisciplinary professional teams, b skills;	/ IU- MFMSE1006- 3	IU-MSE9									
	Assesses the urger procedures in case allow it;	ncy and need of poisoning a	to act in accordance with standar nd accidents at work, if the conditior	IU- 5 MFMSE1006- 4	IU-MSE11									
	Clarifies the depen and physical factor environment, inclue	dence of heal ors related to ding emergenc	th and disease on chemical, biologicant the immediate living and workin y situations;	I IU- 5 MFMSE1006- 5	IU-MSE13									
	Takes occupational	anamnesis;		IU- MFMSE1006- 6	IU-MSE14									
	Proposes measures to prevent and mitigate environmental disasters; IU- IU-MSE15 MFMSE1006- 7													
	Argues positions on the complex relatio	the benefits o nship betweer	f a multidisciplinary approach in solvin living and working conditions;	g IU- MFMSE1006- 8	IU-MSE18									
Prerequisites	In accordance with	the Rulebook o	on the Integrated Studies at the School	of Medicine Univ	ersity of Mostar									
for the course														
enrolment														
	Week / shift	τορ	с											

Course	Lectures	(L1) History of environmental health
content		(L2) Environmental factors
		(L3) Environment, work and health
		(L4) Health effects of air pollution. Risk management
		(L5) Principles of occupational health
		(L6) Principles of health risk assessment
		(L7) Risk assessment in environmental health and occupational health
		(L8) Risk management in environmental health and occupational health
		(L9) Determination of individual and population exposure
		(L10) Physical factors in the general and working environment
		(L11) Biological factors in the general and working environment
		(L12) Chemical factors in the general and working environment
		(L13) Global health and environmental problems
		(114) Health aspects of housing and urbanization
		(L15) Water and health
		(L10) Nutrition and health
		(L11) Laboratory testing and monitoring
		(112) Occupational physiology and psychology
		(L13) Protection against the effects of work environment factors
		(114) Occupational diseases, work-related diseases and work-related
		iniuries
	Seminars	(S1) Global environmental problems and health
	Serimars	(S2) Threat assessment and exposure control
		(S3) Water and health
		(S4) Occupational health in practice
		(S5) Protection against the effects of work environment factors
		(S6) Measurement of physical factors on site and interpretation of
		measurement results
		(S7) Threat assessment and prevention of exposure to chemical factors at
		the workplace and in the environment
		(S8) Risk assessment and prevention of exposure to physical factors at the
		workplace and in the environment
		(S9) Exposure to ionizing and non-ionizing radiation
		(S10) Disinfection, disinfestation and pest control
		(S11) Occupational and work-related diseases
		(S12) Workplace and cancer
		(S13) Injuries at work
		(S14) Assessment of work capacity
	Exercises	(E1) Occupational health clinic
		(E2) Supervision of food and water safety
		(E3) Contaminants in foodstuffs
		(E4) Water supply and waste water disposal
		(E5) Disinfection, disinfestation and pest control
		(E6) Chemical factors at the workplace
		(E7) Monitoring of chemical pollution at the workplace and in the
		environment
		(E8) Epidemiological methods in hazard identification
		(E9) Overcoming risks and measures of protecting the health from
		environmental factors
		(E10) Conduct in emergency circumstances
		(E11) Risk assessment and prevention of exposure to chemical and physical
		factors at the workplace and in the environment
Language	English	
E-learning	Up to 20% (Lectures and sen	ninars only).
Teaching	lecturing methods (lecture, r	presentation, demonstration)
methods	participatory and interactiv	ve methods (free and guided conversation, dialogue, discussion, debate.
	negotiation, mediation)	· · · · · · · · · · · · · · · · · · ·
	research methods (project, o	case analysis, interview, survey, questionnaire, field work, brainstorming)
	Typ	bes of assessment (indicate - Bold)

		Type of p		Type of exam						
midterm	seminar	essay/re	eport	practical/	project task	other	written	oral		practical
	paper						exam	exan	n	
			Allo	ocation of E	CTS credits and s	hare in the gr	ade			
Stude	ent obligatic	ons	Lea	arning	Hours of w	orkload	Share in EC	TS	Share in grade	
			outco	me code						
Class	attendance	and			60		2			0 %
p	articipation									
Se	minar paper				5		0.15		0 %	
Pre-exa	m/Written	exam	IU-MFMSE1006-1		15		0.5		50 %	
			IU-MFMSE1006-2							
			IU-MFN	VSE1006-4						
			IU-MFN	VSE1006-5						
			IU-MFN	VSE1006-7						
	Oral exam		IU-MFN	VSE1006-1	10		0.35			50 %
			IU-MFN	VSE1006-2						
			IU-MFN	VSE1006-3						
			IU-MFN	VSE1006-5						
			IU-MFN	VSE1006-6						
			IU-MFN	VSE1006-8						
		n total			90 3.0 100 %					100 %
				Method	of calculating the	final grade				

The subject exam is written and oral.

Written test (full written test 50 % of the grade)

All those who regularly attended classes have the right to take the written part. Also, the written exam can be taken by students who have passed the pre-final exams of the teaching units during which they were not in class (20 %). The written exam contains 50 questions.

Passing the written exam is a prerequisite for taking the oral exam. The final grade entered in the student grade book (index) is the average grade of the written and oral part of the exam.

According to the Study Regulations, the final grade is obtained by the arithmetic mean of the grades on the written and oral parts of the exam, while the grade of the written part of the exam is determined as follows:

A = 91-100 % 5 (Excellent)

B = 79 to 90 % 4 (Very good)

C = 67 to 78 % 3 (Good)

D = 55 to 66 % 2 (Pass)

F = 0 to 54 % 1 (Fail)

Literature	Title	Edi	tion		Lan	guage			Type of I	iteratur	e
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Current Diagnosis and Treatment Occupational and Environmental Medicine, 6th Edition. LaDou J, Harrison R. McGraw Hill 2022		x		x			x			
Additional	Zdravstvena ekologija i medicina rada, Capak K. Bubaš M, Medicinski fakultet, Mostar, 2022	х		x						х	

Additional course information

The class of the Environmental and Occupational Health consists of 14 thematic units. Each unit comprises: 1-2 hours of lectures, 1-3 hours of seminars and 1-3 hours of exercises.

Class quality monitoring methods:

- Student survey

- Analysis of teaching quality by students and teachers

- Analysis of exam passing rate

- Report by the Office for Teaching Quality

- Self-evaluation and extra-institutional evaluation (visit of teams for quality control)

Study	MEDICAL STUDIES IN ENGLISH												
Cycle	INTEGRATED	Type	UNIVERSITY										
, Study track	-	Module	-										
Year of study	5	Semester	X										
Course title	EPIDEMIOLOGY	Course	MFMSE1007										
	WITH CLINICAL	code											
	ROTATION												
ECTS	3	Status	OBLIGATORY										
	Teaching hours		Lectures	Exercises	Seminars	Practice							
	T		20	30	20	0							
Course objectives	Understanding the ways to suppress to non-infectious dise	e mechanisms (the spread of e eases.	of the origin, spread and pidemics of infectious d	l distribution of di liseases, as well as	iseases in the pop s ways to fight ag	oulation, and ainst chronic							
Course learning	Learning outcome Student:	(LO)			Course learning outcome code	LO code at the study program level							
outcomes	Plans and defines data.	epidemiologi	cal research, analyzes	epidemiological	IU- MFMSE1007-1	IU-MSE1							
	Evaluates the appl	ication of epid	emiological research me	ethods.	IU- MFMSE1007-2	IU-MSE8							
	Solves problem t prevalence, morta	asks with bas lity and lethali	ic measures of freque ty).	ncy (incidence,	IU- MFMSE1007-3	IU-MSE10							
	Analyzes the curre and the surroundi	nt situation of ng area.	the epidemic in Bosnia a	nd Herzegovina	IU- MFMSE1007-4	IU-MSE5							
	Implements curre infectious and nor	nt epidemiolog	gical measures to contr eases.	ol and prevent	IU- MFMSE1007-5	IU-MSE10							
	Explains models of diseases and discu	of surveillance	of infectious and mass	non-infectious	IU- MFMSE1007-6	IU-MSE18							
D					·								
for the course	In accordance with	i the Rulebook	on the integrated Studie	es at the School of	Medicine Univer	sity of Mostar.							
emonnent	Week / shift	Тор	ic										
Course	LECTURES	(L1)	Basic definitions, diseas	se models and div	ision of epidemic	ology.							
content		(L2) infe	Epidemiological meth ctious diseases, epide demiological measureme	nods: natural co miological variab ents.	ourse of infection les, epidemiolog	ous and non- gical research,							
		(L3)	Causes of disease-	risk factors: ph	ysical, chemica	l, biotic and							
		(L4)	The role of persons and	d causative agents	i.								
		(16)	Vografik s chain.			a sural shares is							
		(20)	Prevention (primary, s	econdary and ter	tiary) of infectiou	us and chronic							
		(L3) non (L7)	Prevention (primary, s -infectious diseases. Epidemiology of	econdary and ter droplet, intest	tiary) of infectiou inal, blood-bor	ne diseases.							
		(L7) (L7)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis.	econdary and ter droplet, intest	tiary) of infectiou inal, blood-bor	ne diseases.							
		(L3) non (L7) Ant (L8)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination.	econdary and ter droplet, intest	tiary) of infection	ne diseases.							
		(L3) non (L7) Ant (L8) (L9)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology.	econdary and ter droplet, intest	tiary) of infection	ne diseases.							
		(L3) non (L7) Ant (L8) (L9) (L10	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology.) Communications in ep	econdary and ter droplet, intest pidemiology.	tiary) of infection inal, blood-bor	ne diseases.							
		(L3) non (L7) Ant (L8) (L9) (L10 (L11)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. Communications in ep .) Hospital infections. Na 2) Surveillance of infection	econdary and ter droplet, intest bidemiology. aturally-focal infer ous diseases. Chro	tiary) of infection inal, blood-bor ctions. pnic non-infection	us and chronic ne diseases. us diseases.							
		(L3) non (L7) Ant (L8) (L9) (L10 (L11 (L12) (L13)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. D Communications in ep D Hospital infections. Na Surveillance of infectious Threatening infectious	econdary and ter droplet, intest bidemiology. aturally-focal infer ous diseases. Chro s diseases.	tiary) of infection inal, blood-bor ctions. onic non-infection	us and chronic ne diseases. us diseases.							
		(L3) non (L7) Ant (L8) (L9) (L10 (L11 (L12 (L13 (L14	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. O Communications in ep D Communications in ep D Hospital infections. Na D Surveillance of infections D Threatening infectious D Prevalence of tubercu	econdary and ter droplet, intest bidemiology. aturally-focal infer ous diseases. Chro s diseases. losis.	tiary) of infection inal, blood-bor ctions. pnic non-infection	us and chronic ne diseases. us diseases.							
	SEMINARS	(L3) non (L7) Ant (L8) (L9) (L10 (L11 (L12 (L12 (L12 (L12) (S1)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. O Communications in ep O Hospital infections. Na O Surveillance of infectious Threatening infectious O Prevalence of tubercu Comparison of measure	econdary and ter droplet, intest bidemiology. aturally-focal infer ous diseases. Chro s diseases. losis. ements from three	tiary) of infection inal, blood-bor ctions. pnic non-infection	us diseases.							
	SEMINARS	(L3) non (L7) Ant (L8) (L9) (L10 (L11 (L12 (L13 (L14 (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L14) (L15) (L14) (L15) (L14) (L15) (L15) (L16) (L16) (L16) (L16) (L16) (L16) (L17) (L16) (Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. O Communications in ep O Communications in ep O Surveillance of infectious O Threatening infectious O Prevalence of tubercu Comparison of measure egorical data analysis, nu	econdary and ter droplet, intest bidemiology. aturally-focal infer ous diseases. Chro s diseases. losis. ements from three umerical data asso	tiary) of infection inal, blood-bor ctions. phic non-infection e or more indeper potation analysis	us diseases. ne diseases. us diseases.							
	SEMINARS	(L3) non (L7) Ant (L8) (L9) (L10 (L11 (L12 (L13 (L14 (S1) cate (S2) (S3)	Prevention (primary, s -infectious diseases. Epidemiology of hropozoonosis. Vaccination. Military epidemiology. Ocommunications in ep Distribution of the sections Distribution of the sections Distribution of the sections Comparison of measure egorical data analysis, nu Health statistics, vital s Analytical. experiment:	econdary and ter droplet, intest bidemiology. aturally-focal infer- ous diseases. Chro s diseases. losis. ements from three umerical data asso tatistics, demogra al and meta analy	tiary) of infection inal, blood-bor ctions. pnic non-infection e or more indeper pciation analysis uphic statistics sis	us diseases. ne diseases.							

					(; a (; h (; c (;	 (S5) Epidemiology of mass non-infectious diseases, measures of incidence, associations and potential impact. (S6) Blood-borne diseases, techniques of epidemiological surveillance of hospital infections. (S7) Planning mandatory vaccinations, optional vaccines, vaccinations under certain epidemiological circumstances, and the importance of vaccines. (S8) DDD in infectious disease surveillance 									
					(\$9)	Intestinal infection	ous diseases, a	anthropozoonos	sis, pre	venta	ble infectious			
					c ()	(S10) Epidemiology of infectious diseases transmitted by insects									
	-	EXE	RCISES		((E1) Descriptive epidemiology									
					((E2) Calculation of incidence, prevalence, mortality rate.									
					((E3) Calculation of sensitivity, specificity, positive and negative predictive									
					V	value of the diagnostic test. Epidemiological indicators of health status									
						(E4) Law on the Protection of the Population from mechods Diseases.									
Language		Engl	ish												
E-learning		Class	ses are co	nduct	ed live. If n	ece	ssary, lectures an	d seminars ca	n take place in c	ombin	ation	or completely			
		onlir	ne throug	h the e	e-learning	sys	tem up to a maxi	mum of 20%.							
Teaching		Teac	hing met	hods a	nd partici	pate	ory and interactiv	e methods.							
methods															
					Туре	es of assessment (indicate - Bold)									
-		-	Type of p	ore-exa	amination	obl	igation	-	T	ype of	exam				
midterm	semir	nar	essay/re	port	practi	cal/	project task	other	written	ora	al	practical			
	раре	er			All + !	- 6 1			exam	еха	m				
Churche		+!-			Allocation	OTE	CIS credits and s	nare in the gr	ade	TC	ch	ana in ana da			
Stude	nt oblig	gatio	ons	out	earning	ć	Hours of w	orkioad	Share in EC	15	Sn	are in grade			
Atte	nding c	lasse	es				70		2.3			10%			
Pre-exa	m/writ ⁻	ten e	exam	IU- N	/FMSE1007	-	14		0.5			80%			
	1,2,3,4,5,6											4.00/			
Fina	al oral e	exam	1	10-1	23456	-	6		0.2			10%			
	In total 90 3 100%														
					Meth	nod	of calculating the	e final grade							
Final exam	(maxi	mum	32 point	:s)				<u>v</u>							
The final ex	kam tes	sts ke	ey, specifi	c com	petencies.										
										a					

The final test has 32 questions. A student who correctly solves less than 18 questions (55%) of the final test does not receive a grade higher than F.

Final grade

is the sum of ECTS grades achieved during classes and on the final exam, and is determined based on the absolute distribution according to the Rulebook on studying at the University of Mostar:

A = 91-100% 5 (excellent)

B = 79 to 90% 4 (very good)

C = 67 to 78% 3 (good)

D = 55 to 66% 2 (sufficient)

F = 0 to 54% 1 (insufficient)

Literature	Title	Edition			Lan	guage		Type of literature				
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	Gordis L.		х		х			х				
	Epidemiology, 3rd ed.											
	WB SANDESS											
	Company											
	PHILADELPHIA,2004.											
	Gamulin S. Clinical		х		х			х				
	research clinical											
	epidemiology.											

	Medicinska naklada												
	2012.												
Additional	David L Heyman,MD		х		х			x					
	Editor.Control of												
	communicable												
	diseases. American												
	Public Health												
	Association 2022.												
Additional co	urse information												
Students are	Students are obliged to regularly attend and actively participate in all forms of classes. In the case of being prevented from												
attending clas	attending classes, students should have proof of a justified reason.												

Study program	MEDICAL STUDIE	S IN ENGLISH											
Cycle	INTEGRATED	Туре	UNIVERSITY										
, Study track	-	Module	-										
Year of study	6	Semester	XI										
,	MEDICAL												
Course title	STATISTICS	Course code	MFMSE1101										
ECTS	1.5	Status	OBLIGATORY	- ·									
	leaching hours		Lectures	Exercises	Seminars	Practice							
	To convert to the start				5	0							
Course	application of ac	ents with basic stati	istical principles, r	esearch methods in	biomedicine, and	tne							
objectives	Learning outcom		rennear practice.		Course	10 code at							
Course	Student:				learning	the study							
learning					outcome code	, program							
outcomes						level							
	Searches scienti	fic literature, appli	es biostatistical i	methods, analyzes	IU-MFMSE1101-	IU-MSE1							
	results and critic	ally evaluates conclu	usions.										
	Student applies	research results to p and therapeutic met	batient care in teri	ms of choosing the	2	IU-IVISE1							
	Interprets paran	rets parameters of vital statistics and recognizes epidemiological IU-MFMSE1101- IU-MSE1											
	problems.												
	Interprets inform	nation about drugs a	and medical equip	oment published in	IU-MFMSE1101-	IU-MSE11							
	journals.				4								
	Interprets the s	ensitivity and speci	ficity of diagnost	ic tests in making	IU-MFMSE1101-	IU-MSE15							
	patient care deci	sions.											
	Evaluates and ap	opiles a critical appro	bach to different f	orms of guidelines,	6	10-1015E10							
	are the result of	the collective opinio	on of experts.		-								
	Evaluates resear	ch protocols and so	cientific articles a	s part of the peer	IU-MFMSE1101-	IU-MSE1							
	review process.				7	IU-MSE7							
						IU-MSE21							
	Participates and	coordinates in res	searcn projects c	based on acquired	8	10-101329							
	Kilowieuge of bit		ren meenous.										
Prerequisites	In accordance wi	th the Rulebook on	the Integrated Stu	dies at the School of	Medicine Univers	sity of Mostar.							
for the course													
enrolment													
	Week / shift	Topic											
content		Types of I	biomedical resear	cn · · · · · · ·									
content	Lectures (L1-L5)	Probabilit	ty and related top	ics for making infere	ences about data								
		Ivietnods	of evidence-based	a medicine and decis	sion analysis								
		Summariz	zing and displaying	g data in tables and	graphs								
	Evorcicos (E1 E2)	N Research	questions related	to one group of res	pondents								
		Besearch	questions related	to three or more se	narate grouns								
		Research	Research questions about the relationship between variables										
		Analyzing	research questio	ns about survival									
		Statistical	I methods for mul	tiple variables									
	Seminars (S1-S5)	Survey re	search										
		Reading r	medical literature										
		Vital stati	stics parameters a	and probability indic	es								
Language	English												
E-learning	Classes are cond	lucted live. If neces	sary, lectures and	d part of the exerci	ses can be comb	ined (live and							
	online) or compl	etely online via e-lea	arning platforms (Googie Meet) up to	max of 20%.								

Teaching		Теа	ching, int	teractiv	/e and	active-e	xperientia	I.								
methous					-	Types of	assessme	nt (indica	te - Bol o	d)						
			Type of	f pre-e	kamina	tion ob	igation					Тур	e of e	xam		
midterm	semi	inar	essay/r	eport	р	ractical/	project ta	sk	other	-	written e	xam	ora		prac	tical
	рар	er											exan	n		
					Alloca	tion of I	CTS credit	s and sha	ire in the	e grac	de					
Stude	nt obli	igatio	ons	Lea	rning o	utcome	H	ours of w	orkload		Share i	n ECTS	5	Sha	re in g	grade
					cod	e										
				IU-	MFMSE	1101-1										
Class atter	ndanci	e and	active	10-	MEMSE	1101-2										
narti	rinatic	n wit	h	10-		1101-3										
nrenaratio	n for t	he n	ractical	IU-	MEMSE	1101-4		30			1	1			30 %	
preparatio	exam	ne p	actical	IU-	MFMSE	1101-6										
	CAUIT	•		IU-	IU-MFMSE1101-7											
		IU-	MFMSE	1101-8												
				IU-	MFMSE	1101-1										
		IU-	MFMSE	1101-2												
		IU-	MFMSE	1101-3												
Pre-exar	Pre-exam/Written exam							15				.5			70 %	
				10-	MEMSE	1101-5										
				IU-	MFMSE	1101-7										
				IŪ-	MFMSE	1101-8										
			In total					45				1.5			100 %	6
						Method	of calcula	ting the fi	nal grad	de						
The final g	grade	is cal	culated a	accordi	ng to i	the Rule	book on s	studying a	at the U	Jniver	sity of Mo	ostar a	nd ap	plies	to all	study
groups, it i	s obta	ined	as follow	s:	-						-		-	-		-
0																
A = 91 to 1	00% 5	i (exc	ellent)													
B = 79 to 9	0% 4	(verv	good)													
C = 67 to 7	2% 2		4) 2000)													
D = 55 to 6	6% J	(goot	icient)													
E = 0 + 0 = 54	0/0 Z	incuf	ficiont)													
F = 0 10 54	70 I (insui	ncient)													
The final a						4 I		200/					~			
The final g	rade is	stne	Sum of w	leights	= prac	tical par	t of the ex	am 30% -	- writter	n part	of the exa	am 70%	/o 	- 6 124 -		_
Literature (indicato)		titla	litle	(00r)	Edi	tion		Lar	iguage		:1:	heel	Type		eratur	2
(indicate)	(uue,	autior, y	(ear)	own	other	croatian	english	other	mult	llingual	DOOK	artic	ie s	script	other
Compulso	ry Da	awso	n B, Trap	p RG.												
	Ba	asic	& Cl	inical												
	Bi	ostat	istics. 4 ^u	" ed.												
New York: Lange x						х		х				Х				
	M	ledica	al v													
	Bo	ooks/	McGraw	-Hill;												
	20	<u>)04.</u>														
Additional	Te	eachi	ng mater	ials	Х			х								Х
Additional	cours	e info	ormation		-	-										
Students a	re obl	iged	to regula	rly atte	end and	d active	y participa	te in all f	orms of	classe	es. Studen	ts mus	st com	plete	e all cla	isses
or excused	l absei	nces	up to the	limit p	rescrit	oed by t	ne Rulebo	ok of the	School o	ot Med	dicine.					

or excused absences up to the limit prescribed by the Rulebook of the School of Medicine.

Study	MEDICAL STUDIES	IEDICAL STUDIES IN ENGLISH									
Cycle	INTEGRATED	Type	UNIVERSITY								
Study track	-	Module	-								
Year of study	6	Semester	XI								
Course title	PEDIATRICS	Course	MEMSE1102								
		code									
ECTS	12	Status	OBLIGATORY								
	Teaching hours		Lectures Exercises	Seminars	Practice						
Course	to train the stude	nt to be able t	o understand the basics of pediatrics as a	discipling that do	ols with						
objectives	children from birth - to provide the stu medical care	to adulthood udent with the	basic skills needed to work with children	in the environme	nt of primary						
Course learning outcomes	Learning outcome Student:	(LO)		Course learning outcome code	LO code at the study program level						
	Describes and exp approach in solv population.	lains the basio ving professio	cs of pediatrics and applies a scientific nal medical issues in the pediatric	IU-MFMSE1102- 01	IU-MSE1						
	Describes and exp ages (infant, toddl	lains the basic er, adolescent)	features related to children of different as an object of interest in pediatrics.	IU-MFMSE1102- 02	IU-MSE2 IU-MSE3						
	Describes and app well as rehabilitati	lies measures o on of sick child	of disease prevention and treatment, as Iren.	IU-MFMSE1102- 03	IU-MSE6 IU-MSE10						
	Explains the need to well as the need for	for the normal or supervision o	growth and development of children, as of the aforementioned.	IU-MFMSE1102- 04	IU-MSE3						
	Explains and descr of the organizatior	ibes the impor	tance of vital statistics and basic aspects e for mothers and children.	IU-MFMSE1102- 05	IU-MSE9 IU-MSE10						
	Describes and ever	lains the imp	lomentation of newborn screening and		IU-MSE11						
	vaccination and oth health.	er measures of	prevention and preservation of children's	06	IU-MSE10 IU-MSE11						
	Explains, defines, according to the fu	and classifie inctions and di	s the casuistry of special pediatrics seases of the main organ systems.	IU-MFMSE1102- 07	IU-MSE5 IU-MSE6 IU-MSE8						
	Explains and descr childhood so that independently rec level of outpatient	ibes the most students, as for ognize and sol work in the pr	common acute and chronic diseases of uture doctors of general medicine, can ve the problems of sick children at the imary health care.	IU-MFMSE1102- 08	IU-MSE9 IU-MSE10 IU-MSE11 IU-MSE14						
	It offers a solution medicine.	on for the mo	ost common emergencies in pediatric	IU-MFMSE1102- 09	IU-MSE10 IU-MSE11 IU-MSE14						
D	la sessari internet	the Dull 1			it f. h.d. i						
for the course	In accordance with	The Rulebook	on the integrated Studies at the School o	r Medicine Univers	sity of Mostar.						
	Week / shift	Тор	ic								
Course	Lectures	Th	e teaching of the pediatrics course cons	ists of 200 school	hours in						
content	Seminars Exercises	wh exe	 which the teaching units are covered through lectures, seminars and exercises, namely: 1) Social medicine 2) Growth and development of the child 3) Medical psychology 4) Hereditary diseases, nutrition and eating disorders 5) Disorder of water, electrolytes, minerals, and ABS 								
			6) Neonatology 7) Immunology								

		 a) Allergology 9) Rheumatology 10) Infectious diseases 11) Vaccination 12) Hematology and oncology 13) Nephrology 14) Cardiology 15) Pulmonology 												
						L5) Pulmor L6) Endocr L7) Gastroo L8) Neurol L9) Childre 20) An acut	nology inology enterolog ogy n's orthc tely enda	gy and he pedics ngered c	epatology hild					
Languaga		nalich			2	21) Sympto	omatic tr	eatment	of children					
E-learning		lasses are	conduc	ted in p	erson.	If necessar	v. lectur	es and se	eminars can b	oe take	n combir	ned (in i	oerson	
	a	nd online	or com	pletely c	online t	hrough e-le	earning p	latforms	(Google Mee	et), up t	o max 20)%.		
Teaching methods	Т	eaching, i	nteractiv	/e and a	ctive-e	xperiential.								
		Tupo	f pro ov	Ty	/pes of	assessmen	t (indicat	:e - Bold)		Tun	o of over	~		
midterm	semina	r essay,	report	pra	ctical/p	project task	:	other	written	Тур	oral	prac	tical	
	paper	Allocation of ECTS credits and share in the grade												
Stude	Ident obligations Learning Hours of workload Share in ECTS Share in gra								rade					
Atter	nding cla	isses					200		6.	7		0%		
Pre-exam	n/Practi	cal exam	IU-M IU-M	FMSE110 FMSE110	02-08 02-09	40			1.	1.3 0%				
Pre-exam	n/Writte	n exam	IU-M IU-M IU-M IU-M	FMSE110 FMSE110 FMSE110 FMSE110)2-01)2-02)2-03)2-04		60		2	!		50%		
Pre-exa	am/Ora	exam	IU-M IU-M IU-M	FMSE110 FMSE110 FMSE110	02-05 02-06 02-07		60		2	2		50%		
		In total					360		12	2		100%	,)	
	<u> </u>			M	lethod	of calculati	ng the fi	nal grade						
The final gr + Oral)/2. A	ade is o detaile	btained a: d descript	ion is giv	hmetic i ven in th	mean o ie addit	f the grade ional infor	es from t mation a	he writte bout the	n exam and t subject.	he oral	exam, th	iat is: (V	Vritten	
Literature		Title	,	Ed	ition		Laı	nguage			Type of I	iteratur	e	
(indicate)	(ti	tie, autho	r, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory	y Mar Klieg AM, Esse Pedi Else	arcdante K, egman RM, Schuh 1, eds. Nelson sentials of diatrics, 9 th edition, evier, 2022.		, 1 F	×		×			×				
	Lissa eds. Text Paec edit 202	ssauer T, Carroll W, ds. Illustrated extbook of aediatrics, 6 th dition, Elsevier, D21.					X			×				
Additional	Sele fron	cted	chapters Nelson's	5	x		х			x				

	Textbook of Pediatrics,											
	21 st ed. Elsevier, 2019.											
	Selected papers from	х	x				х					
	medical journals											
Additional co	urse information											
Final exam ha	as three parts: written, pra	actical and ora	al exam.									
The written e	exam consists of 50 test-q	uestions with	n multiple choice of	answers	s (one of the f	five offe	ered ans	wers is	alwavs			
correct). To p	ass the exam (grade suffi	cient). the stu	udent must answer	55% of t	the questions	correct	tlv. i.e r	nust ob	tain at			
least 28 point	S.	,,					.,,,.					
According to the Pulebook on Studying at the University of Mostar grades are assigned as follows:												
-54% insufficient (1).												
	(1)											
55-66 % sufficient (2);												

67-78 % good (3); 79- 90 % (very good 4); 91-100 % excellent (5).

During the practical exam, the assistant evaluates the student's practical skills in pediatrics. The practical exam begins with an interview with a patient, and his parents. History taking and performing physical exam of the patient, beside interpretation and evaluation of the clinical and laboratory data, is of outmost importance for the assessment of student's clinical performance.

In order to take the oral exam, it is necessary to pass both the practical exam, and the written exam.

The oral exam includes the most important, integrative units of pediatrics. Throughout 5 questions, integrative knowledge is examined, which is essential for understanding the whole subject and is the basis for good medical practice.

The final grade is the average of the grade of the written and oral exam, that is: (Written + Oral)/2.

Study	MEDICAL STUDIES IN ENGLISH									
programme										
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module	-							
Year of study	6	Semester	XI							
Course title	FAMILY	Course	MFMSE1103							
	MEDICINE WITH	code								
	CLINICAL									
	ROTATION									
ECTS	9	Status	OBLIGATORY							
	Teaching hours		Lectures	Exercises	Seminars	Practice				
			22	44	-					
Course	The main goals are	to familiarize	students with the orga	y health care in	Bosnia and					
objectives	Herzegovina, to fa	miliarize them	with the basic characte	eristics and compe	tencies of family	/ medicine				
	doctors as well as	with the specif	ic approach to patients	in daily clinical pr	actice.	LO codo at the				
Course	Learning outcome	(LO)			learning	study program				
learning	Stutent.				outcome code	level				
outcomes	Describes and exp	lains the value	of teamwork in primar	y patient care,	IU-	IU-MSE10				
	the cooperation of	f different heal	th services at the prima	ry level as well	MFMSE1103-1					
	as at other levels o	of health care. I	Evaluates and applies p	rotocols and						
	algorithms of prev	entive, diagnos	stic and therapeutic pro	ocedures in the						
	most common dise	eases in family	medicine according to	current						
	guidelines in the tr	reatment of dis	eases and nealth prese	rvation.						
		re contextual	repres of family medic	ine:	MFMSE1103-2	10-1013211				
	coordination/com	nlexity of care	Describes care for the	, individual in the						
	community using a	a holistic appro	ach.							
	Applies a targeted	anamnesis and	d a targeted clinical exa	mination of the	IU-	IU-MSE14				
	patient in the clini	c and independ	lently analyzes and arg	ues the working	MFMSE1103-3					
	diagnosis from the	clinical picture	e and from the results o	of diagnostic						
	tests. Applies clinio	cal examinatior	n skills on the model in	the clinical skills						
	cabinet. Apples ma	anagement of r	nedical documentation	, fills in						
	referrals and trave	l orders, and a	ssesses temporary inca	pacity for work.						
	Create a suitable p	olan for rationa	I selection of laborator	y tests,	IU- MEMSE1103_4	IU-IVISE15				
	interpretation of t	ocarolograms, heir results and	spirometry, blood pres timplementation of int	sure CNAP,						
	diagnosis and trea	tment of disease	ses Apply rational trea	tment with						
	supervision and m	inimization of p	polypharmacy. Apply th	e correct						
	prescription of pre	scription drugs	and administration of	parenteral						
	therapy									
	Applies basic com	munication skil	ls in contact with the p	atient. Adapts	IU-	IU-MSE16				
	the method of pre	sentation and o	clarification of medical	information to	MFMSE1103-5					
	outpatients accord	ling to the leve	l of health literacy of th	ne patient and						
	family members w	ith the patient	's consent. Practices br	eaking the bad						
	Applies courseling	it and find sour	d family members in va	prious areas of						
	nromoting healthy	lifestyles nrev	and family members in various areas of							
	monitoring of pati	ents. Also appli	ies group counseling in	the clinic and in						
	the community.	- 1- 1-	5							
	Presents and expla	ains medical inf	ormation about the dis	sease/diagnosis	IU-	IU-MSE18				
	to other health an	d non-health p	rofessionals within prir	nary health	MFMSE1105-6					
	care, secondary ar	nd tertiary heal	th care, cooperates wit	h patient						
	associations and p	rovides educat	ion on the most comm	on diseases in						
	the community.									

Prerequisites	In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of Mostar.								
for the course									
enrolment									
Course content	Week / shift	Topic							
	Lectures	L1 Introductory lecture	ta sta lta s						
		L2 Family Medicine as a medical d	scipline						
		L3 Patient oriented medicine.							
		L4 Sickness and disease							
		L5 Communication in Medicine							
		Lo Doctor - patient communication	I						
		L7, L8 Women's health - Cardiovascul	ar risk assessment and mental health. The						
		problem of the elderly							
		19, 110 Emergency interventions in	the family medicine doctor's office						
		L11 Health problem of the elder p	opulation						
		L12 Polypharmacy							
		L13, L14 Men's health: prevention	and treatment most common health						
		issues							
		L15 Ankle and knee injuries							
		L16 Elbow and shoulder injuries							
		L17 Cardiovascular risk assessmen	t						
		L18 Cardiovascular disease preven	tion						
		L19 Health promotion and prevent	tion in the community						
		L20 Health promotion and media							
		L21 Violence against women							
		L22 Violence against children and	elder						
	Seminars	S1, S2 Family medicine practice: or	rganization and work						
		S3, S4 Difficult patient – treatment	t. Breaking bad news						
		S5, S6 Diagnosis and treatment of	anemia						
		S7, S8 School children in Family mo	edicine practice .Preschool health care						
		S9, S10 Clinical skills through case	report						
		S11, S12 COPD and asthma							
		S13, S14 Rational use of medicines	s. Rational referral to hospital						
		S15, S16 Addiction treatment. Alco	bhol and drug abuse						
		S17, S18 Diabetic patient in family							
		S21 S22 Headache differential dia	anosis and treatment						
		S23, S24 Hypertension diagnosis a	nd treatment						
		S25, S24 Hypertension diagnosis d							
		S27, S28 Anxiety and depression							
		S29. S30 Chest pain evaluation in t	he family medicine practice						
		S31, S32 Acute respiratory infection	n in the family medicine practice						
		S33, S34 Thyroid problems in the f	amily medicine practice						
		S35, S36 Patient with renal disease	e in the family medicine practice						
		S37, S38 Vertigo							
		S39, S40 Patient with abdominal p	ain						
		S41, S42 Dermatological problem i	n the family medicine practice						
		S43, S44 Patient with gastrointesti	nal problems						
	Exercises	E1-E100 work in the family medicine practice							
		E101-E114 work on models in the	skill cabinet						
Language	English								
E-learning	Classes are conducted in p	person (live). If necessary, lectures	and seminars can be combined (live and						
Teeshin	online) or completely online	e via e-learning platforms (Google N	ieet) up to max of 20%.						
reaching	reaching, participatory-inte	ractive and active-experiential.							
methous	Tv	nes of assessment (indicate - Bold)							
	Type of pre-examination	on obligation	Type of exam						
	. , pe or pre examinatio								

Allocation of ECTS credits and share in the grade Student obligations Learning Hours of workload Share in ECTS Share in grade Attending classes 180 6 0% Seminar IU-MSMSE1103-5 15 0.5 0% Midterm/Colloquium from exercises IU-MSMSE1103-1 30 1 50% Pre-exam/Written exam IU-MSMSE1103-2 30 1 50% IU-MSMSE1103-1 30 1 50% 1 Pre-exam/Written exam IU-MSMSE1103-1 30 1 50% IU-MFMSE1103-1 IU-MFMSE1103-3 30 1 50% IU-MFMSE1103-5 IU-MFMSE1103-4 30 1 50% IU-MFMSE1103-6 30 1 50% 100% Cording to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 5 57-90 very good (3); 73-90 very good (3); 73-90 very good (3); 74 X X X X I Iterature (indicate) Title Edition Language Type of literature	midterm	seminar paper	essay/re	eport	pra	ctical/p	roject task		other	written exam	0	ral exam	Prac	tical
Student obligations outcome code Learning outcome code Hours of workload Share in ECTS Share in grade Attending classes IU-MSMSE1103-5 180 6 0% Seminar IU-MSMSE1103-5 15 0.5 0% Midterm/Colloquium from exercises IU-MSMSE1103-3 15 0.5 0% IU-MSMSE1103-1 30 1 50% 50% Pre-exam/Written exam IU-MSMSE1103-1 30 1 50% IU-MSMSE1103-1 JU-MSMSE1103-1 50% 50% 50% Pre-exam/Written exam IU-MFMSE1103-1 30 1 50% IU-MFMSE1103-1 JU-MFMSE1103-1 30 1 50% VI-MFMSE1103-1 IU-MFMSE1103-1 30 1 50% VI-MFMSE1103-5 IU-MFMSE1103-5 30 1 50% Statisufficient (1); Statisufficient (1); 50% 5 5 Statisufficient (2); Title Interature Type of literature 100% (indicate) Title, author, y		1 • • 1 •	1		Allocati	on of E(CTS credits	and shar	e in the	grade				
	Stude	ent obligatio	ons	L	earning	g	Hours	of workl	oad	Share ir	n ECTS	Sh	are in gi	rade
Attending classes18060%SeminarIU-MSMSE1103-5150.50%Midterm/Colloquium from exercisesIU-MSMSE1103-1 IU-MSMSE1103-5150.50%Pre-exam/Vritten examIU-MFMSE1103-1 IU-MFMSE1103-530150%Pre-exam/Oral examIU-MFMSE1103-1 IU-MFMSE1103-530150%Pre-exam/Oral examIU-MFMSE1103-1 IU-MFMSE1103-530150%Method of calculating the final gradeAccording to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5).Type of literatureTitle (title, author, year)EditionLanguageType of literatureCompulsoryTitle Rakel Textbook of Family medicine 2agreb, 				out	come co	ode								
	Atte	nding class	es					180		6			0%	
Midterm/Colloquium from exercises IU-MSMSE1103-3 15 0.5 0% Pre-exam/Written exam IU-MFMSE1103-1 IU-MFMSE1103-3 IU-MFMSE1103-4 IU-MFMSE1103-4 IU-MFMSE1103-5 30 1 50% 50% Pre-exam/Oral exam IU-MFMSE1103-4 IU-MFMSE1103-5 IU-MFMSE1103-5 30 1 50% 50% Pre-exam/Oral exam IU-MFMSE1103-5 IU-MFMSE1103-5 30 1 50% 50% According to the Rulebook on Studying at the University of Calculating the final grade 70 9 100% 70 S5-66% sufficient (2); 57-78% good (3); 79-90 ver good (4); 91-100% excellent (5). Edition Language Type of literature 100% Compulsory Rakel Textbook of Family medicine Zagreb, Medicinska naklada X X X X X X X X X III IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Seminar		IU-M	SMSE11	03-5		15		0.	5		0%	
Pre-exam/Written exam IU-MFMSE1103-1 IU-MSMSE1103-5 30 1 50% Pre-exam/Oral exam IU-MFMSE103-1 IU-MFMSE103-5 IU-MFMSE103-5 IU-MFMSE103-5 IU-MFMSE103-5 30 1 Pre-exam/Oral exam IU-MFMSE103-5 IU-MFMSE103-5 IU-MFMSE103-5 30 1 Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4">Colspan="4"Colspan="4"Colspan="	Midterm,	/Colloquiur exercises	n from	IU-M	SMSE11	03-3	15			0.	5		0%	
Pre-exam/Written exam IU-MSMSE1103-2 IU-MFMSE1103-1 IU-MFMSE1103-4 IU-MFMSE1103-5 IU-MFMSE1103-6 30 1 50% Pre-exam/Oral exam IU-MFMSE1103-4 IU-MFMSE1103-6 30 1 50% Method of calculating the final grade According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Edition Language Type of literature Iterature (indicate) Title Edition Language Type of literature Compulsory Katić M, Švab I, and associates. Family medicine Zagreb, Medicinska naklada: 2017. X X X X I I I I Additional Language I X X I <				IU-M	FMSE11	03-1								
Pre-exam/Oral exam IU-MFMSE1103-1 IU-MFMSE1103-5 IU-MFMSE1103-5 IU-MFMSE1103-5 IU-MFMSE1103-5 IU-MFMSE1103-5 30 1 50% ILI - MENDES IN SET IN	Pre-exa	m/Written	exam	IU-M IU-M	SMSE11 SMSE11	03-2 03-5		30		1			50%	
$ \begin{array}{c c c c c c } \label{eq:pre-exam/Oral exam} & 1U-MFMSE1103-5 \\ 1U-MFMSE1103-5 \\ \hline \end{titue} & 1U-MFMSE1103-5 \\ \hline \end{titue} $				IU-M	FMSE11	03-1								
ID-MFMSE1103-3 ID-MFMSE1103-3 IU-MFMSE1103-3 ID-MFMSE1103-3 IU-MFMSE1103-3 ID-MFMSE1103-3 Method of calculating the final grade Method of calculating the final grade According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 57-78% good (3); 79-90 very good (4); 91-100% excellent (5). Edition Language Type of literature (indicate) Title Edition Language Type of literature (indicate) Title, author, year) own other rotatian english other multilingual book Article script Other Compulsory Rakel x x x x in	Pre-ex	am/Oral ex	xam	IU-MFMSE1103-4 30 1 50%										
In total 270 9 100% Method of calculating the final grade According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 9 100% 91-100% excellent (5). Edition Language Type of literature (indicate) Title Edition Language (title, author, year) own other croatian english other Compulsory Rakel x x x x x Textbook of Family x x x x x x x 2005 x x x x x x x x x Actić M, Švab I, and associates. x				IU-M	FIVISE11 FMSF11	03-5								
Method of calculating the final grade According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Literature (indicate) Title (title, author, year) own other croatian english other multilingual book Article script Other Compulsory Rakel x			In total	10 11	THOLI	00 0		270		9			100%	
According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Literature (title, author, year) Editor Language Type of literature (title, author, year) Rakel and other croatian english other multilingual book Article script Other Compulsory Rakel x x x x and and <td></td> <td></td> <th></th> <td></td> <td>М</td> <td>ethod o</td> <td>of calculati</td> <td>ng the fin</td> <td>al grade</td> <td>5</td> <td></td> <td></td> <td></td> <td></td>					М	ethod o	of calculati	ng the fin	al grade	5				
0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Literature (title, author, year) 0 ther croatian english other multilingual book Article script Other (title, author, year) 0 von other croatian english other multilingual book Article script Other Compulsory Rakel x x x x x x x I I I I I I I I I I I I	According to the Rulebook on Studying at the University of Mostar grades are assigned as follows:													
55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Literature (title, author, year) Rakel ration Textbook of Family medicine x <t< td=""><td colspan="13">0-54% insufficient (1);</td></t<>	0-54% insufficient (1);													
67-78% good (3); 79-90 very good (4); 91-100% excellent (5). Literature (indicate) Title Edition croatian english other multilingual book Article script Other (indicate) (title, author, year) own other croatian english other multilingual book Article script Other Compulsory Rakel Textbook of Family medicine Zagreb, Medicinska naklada 2005 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	55-66% sut	fficient (2);												
79-90 very good (4); 91-100% excellent (5). Second (4); 91-100% excellent (5). Literature (indicate) Title (title, author, year) Edition Language Type of literature (indicate) (title, author, year) own other croatian english other multilingual book Article script Other Compulsory medicine Zagreb, Medicinska naklada 2005 Rakel Textbook of Family medicine x	67-78% go	od (3);												
S1-100% excellent (s). Title Edition Language Type of literature (indicate) Title edition own other roatian english other multilingual book Article script Other Compulsory Rakel x </td <td>79-90 very</td> <td>good (4);</td> <th></th> <td></td>	79-90 very	good (4);												
Compulsory Rakel Textbook of Family medicine Zagreb, Medicinska naklada 2005 x <td>91-100% e</td> <td>xcellent (5)</td> <th>Titla</th> <td></td> <td>Ed</td> <td>ition</td> <td></td> <td>lan</td> <td>anada</td> <td></td> <td></td> <td>Type of li</td> <td>torature</td> <td><u>,</u></td>	91-100% e	xcellent (5)	Titla		Ed	ition		lan	anada			Type of li	torature	<u>,</u>
Compulsory Rakel Textbook of Family medicine Zagreb, Medicinska naklada 2005 x <td>(indicate)</td> <td>(title</td> <th>. author. v</th> <td>vear)</td> <td>own</td> <td>other</td> <td>croatian</td> <td>english</td> <td>other</td> <td>multilingual</td> <td>book</td> <td>Article</td> <td>script</td> <td>- Other</td>	(indicate)	(title	. author. v	vear)	own	other	croatian	english	other	multilingual	book	Article	script	- Other
Compulsory Raker A A A A A A A A A A A A A A A A A A A	Compulsor	v Rakel	, , ,	,		v		v			v			
Intervision of runny medicine Zagreb, Medicinska naklada 2005 Xatić M, Švab I, and Katić M, Švab I, and X Associates. Family medicine Zagreb, Medicinska naklada: 2017.	compuisor	Textho	ok of Fam	ilv		^		^			^			
Zagreb, Medicinska naklada 2005 Xatić M, Švab I, and Katić M, Švab I, and X associates. X Family medicine Zagreb, Medicinska naklada: 2017.		medici	ne	iii y										
Medicinska naklada 2005 Katić M, Švab I, and x associates. x Family medicine x Zagreb, Medicinska naklada: 2017. x		Zagreb	,											
2005 Xatić M, Švab I, and X X X X Associates. Family medicine X X X X Zagreb, Medicinska naklada: 2017. X X X		Medici	, nska nakla	ada										
Katić M, Švab I, and x x x associates. Family medicine x x Zagreb, Medicinska naklada: x x 2017. x x x		2005												
associates. Family medicine Zagreb, Medicinska naklada: 2017.		Katić N	1, Švab I, a	and		х		х			х			
Family medicine Zagreb, Medicinska naklada: 2017.		associa	ites.											
Zagreb, Medicinska naklada: 2017.		Family medicine												
2017.		Zagreb,												
		iviedici	riska nakla	ada:										
	Additional	2017.	notes		x			x						x
Additional course information	Additional	course infe	rmation		^		I	^				L	<u> </u>	^

Classes in family medicine last 180 hours, of which 114 hours are exercises. Students are divided into smaller practice groups and each group is assigned an assistant. The assistant trains a group of students in the clinical skills of taking anamnesis and status, making clinical decision, as well as in communication skills. Classes take place in clinic in both urban and rural area.

Seminars are a pre-examination obligation for students, which they must prepare in cooperation with teacher. The seminar work also includes a letter to the patient, in which the student conducts the patient's health education in writing.

Lectures cover all the topics covered during the course and are based on a presentation of a case from clinical practice.

Colloquium from exercises consists of 12 OSCE stations on models or on a standardized patient. OSCE (Objective structured clinical examination)

The exam consists of two parts.

The written exam consists of 60 multiple-choice questions, one of which is correct.

The oral exam consists of three questions. One is from the general part, and two are from the special part and in the form of solving a clinical example.

The final grade is obtained as the arithmetic mean of the grades from the written exam and the oral part of exam. According to the Rulebook on Studying at the University of Mostar grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90 very good (4); 91-100% excellent (5).

Study	MEDICAL STUDIES	IN ENGLISH								
Cyclo		Tupo								
Study track	INTEGRATED	Nodulo	UNIVERSITY							
	-	Noulle	-							
Year of study	6	Semester	XI							
Course title	FORENSIC MEDICINE	Course code	MFMSE1104							
ECTS	3	Status	OBLIGATORY							
	Teaching hours		Lectures	Exercises	;	Seminars	Practice			
	-		17	16		17	0			
Course objectives	The aim of the cou scene and body in suicides, accidents living persons as w	irse is to introduc nvestigations nec s), types and tas yell as corpses an	ce students to the role eded in cases of evid ks of forensic medica d human remains and	of forensic me ent or suspec l examination the applied m	edicin ted tr , issue nethod	e in medical p aumatic deat es regarding lology.	bractice, proper ths (homicides, examination of			
Course learning	Learning outcome Student:	(LO)			out	rse learning come code	LO code at the study program level			
outcomes	 describes and of forensic forensic traut 	d explains basic the medicine, inclue matology, expert	heoretical principles fr ding the issues of opinion making and n	rom the field thanatology, nedical law.	IU-M	FMSE1104- 1	IU- MSE1 IU- MSE2			
	 performs ext of death and to properly re 	ernal examinatio assesses whethe ecord the fact of	on of a dead body, rec er the autopsy is requ death (fill in the death	cognize signs ired in order a certificate)	IU-M	FMSE1104- 2	IU- MSE3 IU- MSE5			
	- identifies, de	scribes and name	es injuries on the body	1	IU-M	FMSE1104-3	IU- MSE4 IU- MSE14			
	 recognizes th able to explain to other healt agencies, and 	e cases of suspic in medical inform chcare and non-h d the interested	s of suspicious and non-natural death and is lical information on the disease/injury/death and non-healthcare professionals, regulatory interested public in an appropriate manner							
	- describes an	ance with applic d explains know	able regulations wledge on proper s	ampling for	IU-M	FMSE1104- 5	IU- MSE8			
	toxicology an	alysis					IU- MSE10			
Prerequisites for the course enrolment	In accordance with	the Rulebook or	n the Integrated Studie	es at the Schoo	l of M	edicine Unive	rsity of Mostar.			
	Week / shift	Topic								
Course content	Lectures	(L1) In (L2) Th (L3) Bl (L4) Sh (L5) Gi (L6) As (L7) Di (L8) Ph (L9) Su (L10) H (L11) F	L) Introduction to Forensic Medicine 2) Thanatology 3) Blunt force trauma 4) Sharp force trauma 5) Gunshot injuries 5) Asphyxia 7) Drowning 3) Physical injuries 9) Sudden natural death 10) Human identification in mass disasters 11) Forensic toxicology							
	Seminars	(S1) M (S2) Ci (S3) Pl (S4) In (S5) Tr (S6) Fc (S7) Fc (S8) Co (S9) Sl	 2) Pregnancy – related deaths, manifiedde 2) Medicolegal death investigation 2) Crime scene investigation 3) PMI assessment 4) Injury assessment 5) Traffic accidents analysis 5) Forensic anthropology 7) Forensic genetics 3) Complication of injuries 6) SIDS 							

					(S10) S	Suicide vs. Hom	icide				
	Γ	Exe	rcises		(E1) Ex	kamination of t	he dead body,	/autopsy			
					(E2) Fo	prensic medical	examination	of living person	s		
					(E3) D	eath certificate	and burial pe	rmit			
					(E4) Fo	prensic anthrop	ology				
					(E5) N	ledical docume	ntation				
					(E6) Ex	pert opinion m	naking				
Language		Eng	lish								
E-learning		Clas	ses are co	onduc	ted in person (li	ve). If necessar	y, lectures and	d seminars can	take pl	ace ii	n combination
		(in p	person an	d onlir	ne) or completel	y online throug	h e-learning p	latforms (Googl	e Meet	:) up 1	to max of 20%.
Teaching		Tea	ching, inte	eractiv	ve and active-ex	periential.					
methods											
					Types of a	ssessment (ind	licate - Bold)				
			Type of p	ore-ex	amination oblig	ation		٦	Type of	exan	n
midterm	semir	nar	essay/re	port	practical/p	roject task	other	written	ora	al	practical
	pape	er		-				exam	exa	m	
					Allocation of EC	TS credits and	share in the g	rade			
Stude	ent obli	gatic	ons	Lear	ning outcome	Hours of	workload	Share in EC	TS	Sł	hare in grade
					code						
Atte	nding c	lasse	es			5	0	1,67			0%
Pre-exa	m/Writ	ten	exam	١U-	MFMSE1104-	2	0	0,66			50%
					1, 2, 3, 4, 5			_			
Pre-ex	kam/Or	al ex	am	١U	MFMSE1104-	2	0	0,66			50%
	1, 2, 3, 4, 5										
	In total 90 3 100%										
					Method o	f calculating th	e final grade				

The written exam

The written exam contains 40 questions, which cover all areas covered by the curriculum. To pass the exam (grade sufficient), the student must answer 55% of the questions correctly. According to the Rulebook on studying at the University of Mostar, grades are assigned as follows: 0-54% insufficient (1); 55-66% sufficient (2); 67-78% good (3); 79-90% very good (4); 91-100% excellent (5).

The oral exam

All chapters of forensic medicine will be covered by the oral exam, especially in those parts that are essential in the daily work of a doctor. Integrative knowledge and forensic reasoning skills will be required. The exam will consist of four questions that student will receive on a card. The condition for taking the oral exam is that the student has passed the written exam.

The final grade

The final grade will be calculated as the arithmetic mean of the grade of the written and oral exam grade.

Literature	Title	Edi	tion	Language Ty					Type of I	iteratur	е
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	Payne-James J, Jones		Х		Х			Х			
	R, Karach Steven B,										
	Manlove J. Simpson's										
	Forensic Medicine.										
	13 th ed. London Arnold										
	Publishers 2011										
Additional	Dettmeyer RB, Vehoff		Х		Х			Х			
	MA, Schütz HF.										
	Forensic Medicine										
	Fundamentals and										
	Perspectives. 1 st ed.										
	Springer Berlin,										
	Heidelberg, 2014										
Additional co	urse information										

Study	MEDICAL STUDIES IN ENC	GLISH								
programme										
Cycle	INTEGRATED	Туре	UNIVERSITY							
Study track	-	Module	-							
Year of study	6	Semester	XI							
Course title	PALLIATIVE MEDICINE	Course code	MFMSE1105							
ECTS	1	Status	OBLIGATORY							
	Teaching hours		Lectures	Exe	rcises	Seminars 7	Practice			
Course objectives	The goals of the Palliative -to teach students about	e medicine cou the concept a	rse are: nd organization of pal	lliative c	are, the ro	ble of palliati	ve medicine			
	in patient care and care f may appear. -train students to commu	and care for leading symptom of palliative patient – pain, but also other symptoms that								
	-train students for respor	nsible decision	making within ethica	l framev	vorks	Inders				
	Learning outcome (LO)				Course	elearning	LO code at			
Course learning outcomes	Student:				outco	me code	the study program level			
	Defines palliative care an	d recognizes t	erminal phase of the o	disease	IU- MFM	SE1105-1	IU-MSE1			
	In patients. Knows and explains the	treatment o	f nain which is a l	eading	IU- MFM	SF1105-2	IU-MSF11			
	symptom of the termina	al illness, but	also other symptom	ns that		521105 2	IU-MSE15			
	accompany terminal stag	e of the illnes	s (vomiting, nausea, h	iccups,						
	diarrhea, constipation, de	ecubitus, etc.)		• ••						
	Communicates with te members.	rminally ill	patients and their	family	IU- MFM	SE1105-3	IU-MSE16 IU-MSE17			
	Analyzes other needs of	the terminal	ly ill patient (psycho	logical,	IU- MFM	SE1105-4	IU-MSE9			
	social, religious,) and provide the social sector of the social sector is the social sector of the social sector is the social sect	possibilities of	solving them within	ethical			IU-IVISE10			
	Indiffe works.									
Prerequisites for	In accordance with the	Rulebook on t	he Integrated Studie	s at the	School o	of Medicine	University of			
the course	Mostar.									
enrolment										
Course content	Week / shift	Topi	C Definition of nellist		aliaina an		in nellistive			
Course content	Lectures	(PI)	icine Models of organ	tive me	dicine an	a concepts	in paillative			
		(P2)	Levels of palliative ca	re. Pallia	ative care	team.				
		(P3)	Assistance in meeting	g the nee	eds of pall	iative patien	t			
		(P4 0	Communication with t	he pallia	ative patie	nt and his fa	mily, barriers			
		in co	mmunication							
	Sominaro	(P5)	Ethical issues							
	Seminars	(51)	Who needs pailative When to start nalliati	ve care?						
		(S2)	Emotional needs of	f termir	ally ill p	atients and	their family			
		men	nbers		, ,					
		(S4)	Breaking bad news to	patient	?					
	Exercises	(V1)	(V1) Breaking bad news to patient?							
		(VZ) (V2)	Communication with	termina	ing in patie	ent and his to	amily			
		(V3) (V4)	Pharmacological and	non-pha	armacolog	- gical treatme	nt options			
		for t	erminal patients	P		,				
		(V5)	Ethical doubts and qu	uestions						
Language	English				_					
E-learning	Classes are conducted in	person (live).	If necessary, lectures	and ser	ninars car	n be taken co	ombined (live			
	and online) or completely	y online via e-l	earning platforms (Go	ogle Me	eet) up to	a maximum	of 20%.			

Teaching	Teaching	, interacti	ve and a	active-e	experie	ntial.							
methous			Ty	pes of a	assessm	nent (indi	cate - B	old)					
	Тур	be of pre-	examina	tion ob	oligation	n ,		,		Тур	e of exa	am	
midterm	seminar paper	essay/r	eport	pra	actical/p	project ta	isk	other	writte	n	oral exam	prac	tical
	paper		Allocatio	on of EC	CTS crea	dits and s	hare in	the grad	le		exam		
Stuc	lent obligations		Learn	ing out	come	Hours of workload			Share	in ECTS	S S	nare in g	grade
	0			code									
Attending cl the col	asses and prepa loquium/midter	aring for rm	IU- M IU- M	IFMSE11	105-2 105-3	25			0	,8			
Pre-exan	Pre-exam/Final written exam				105-1 105-2 105-3 105-4		5		0	,2		100%	, ,
	In	total					30			1		100%	, D
			M	ethod c	of calcu	lating the	e final gr	ade					
The final gra demonstrate information	The final grade is given based on the written exam. Additional points that are earned through active participation and demonstrated knowledge in seminars and exercises may be added. The details are given in section: Additional course information section												
Literature Title Edition Language Type of literature													
(indicate)	(title, author, year)			own	other	Croatian	English	other	multilingual	book	article	script	other
Compulsory	 Cherny N, Fallon M, Kaasa S, Portenoy R, Currow DC,eds. Oxford Textbook of Palliative medicine. 2015. Fifth edition. Oxford University Press. Available: <u>https://hamdir.ir/wp- content/uploads/2019/09/0xfo</u> rd-Textbook-of-Palliative- <u>Medicine-N-Cherny-M-Fallon-S- Kaasa-R-K-Portenoy-D-C- Currow-edsOxford-Textbook- of-Palliative-Medicine-2015-</u> Oxford-University-Press.pdf 				x		x			x			
Additional													
Additional co The Palliative exercises. It pharmacolog through lectu and exercise Through class students can the final exa additional po Colloquium- has solved /v family memb characteristi	Additional Additional course information The Palliative Medicine course consists of 25 hours, of which 8 hours are lectures, 7 hours are seminars and 10 hours are exercises. It is taken in one week period. Basic topics, definitions, levels of care, dilemmas in palliative care, pharmacological and non-pharmacological treatment of patients, and the basics of communication will be covered through lectures. Communication with palliative patients and their family members will be the subject of both seminars and exercises, as well as ways to resolve symptoms in palliative patients that negatively affect their quality of life. Through class activities in the form of active participation and demonstrated knowledge in seminars and exercises, students can earn additional points that are added to the points on the final written exam, but only for those who pass the final exam, that is, it is necessary to achieve a minimum of 60% points on the final written exam. A maximum of 3 additional points can be obtained through classes. Colloquium- During the exercises, each student will give an oral case report presentation (a brief case report that student has solved /will solve on his own). The presented cases will include communication skills with palliative patient or his family members, communicating bad news, recommending pain therapy or solving a conditions and situations												
The final exa	The final exam is in written form and the maximum number of points is 20.												
The final gra	de is formed ba	sed on th	e sum o	f the po	oints of	passed t	est and	additior	nal points (if	studer	nt has a	chieved	

them) as follows: 60% -69% grade 2; 70%-79% grade 3; 80%-89% grade 4; 90%-100% grade 5.

Study	MEDICAL STUDIES	IN ENGLISH									
Cvcle	INTEGRATED	Type	UNIVERSITY								
Study track	-	Module	-								
Year of study	6	Semester	XI								
Course title	HEALTH CARE	Course	MEMSE1106								
course thie	ORGANIZATION	code	WII WISE1100								
	AND HEALTH										
	ECONOMICS										
ECTS	2	Status	OBLIGATORY								
	Teaching hours		Lectures	Exercises	Seminars	Practice					
			30	5	10	0					
Course objectives	 to extend student care; to train the stude systems; to achieve an action of the stude system state of the stude state of the state of th	t's knowledge a ents to understa	wledge about the organization of health systems and the organization of health understand the basics of health economics and methods of financing health roach for students to acquire management skills, teamwork and planning at								
	different levels of t	the health syste	em.		6						
Course	Learning outcome	(LO)			learning	study program					
learning	Student.				outcome code	level					
outcomes	Evaluates the met health care, ev multidisciplinary te	hod and conte valuates the eams in health	ent of integration of dia significance and i care.	fferent levels of importance of	IU- MFMSE1106-1	IU-MSE9					
	Assesses the econ	omic paramete	ers that ensure efficien	cy in the health	IU-	IU-MSE11					
	care system, valori care.	zes the treatm	ent outcomes and the o	quality of health	MFMSE1106-2						
	Critically assesses to functionality of the	the socioeconce health system	oeconomic factors that affect the stability and IU- IU-MSE13 system. MFMSE1106-3								
Prerequisites	In accordance with	the Rulebook	on the Integrated Studie	es at the School of	Medicine Unive	rsity of Mostar					
for the course						,					
Chromene	Week / shift	Торі	ic								
Course	Lectures	L1 H	lealth systems								
content		L2 E	lements of the health ca	are system, institu	tion and organi	zation					
		L3 H	lealth policies								
		L4 N	Anagement in the heal	thcare system							
		L5 H	lealth care organization								
		17 H	Initially health care								
		L8 Ir	ntegration of health card	e							
		L9 H	lealth financing								
		L10	Health insurance								
		L11	Health economics								
		L12	Strategic planning in he	althcare							
		114	Quality assessment in t	he healthcare syst	em						
		L15	Role and position of the	e patient in the he	althcare system						
	Exercises	E1 S	E1 SWOT analysis of the selected health institution								
	Seminars	S1 H	lealth system reforms								
		S2 /	Assessment of the pop	pulation health st	atus and selec	ction of health					
		prot	ection measures	ou modical constant	c and healthese	o in omorgons :					
		S3 U	ngamzation of emergen	icy medical service	s and healthcar	e m emergency					
		S4 P	ublic and private health	ncare							
		S5 1	Methods of paying for	r health services	and evaluation	n of treatment					
		outo	outcomes								

Language		Engl	lish											
E-learning		Clas	ses are c	onducte	ed in p	oerson	(live). If ne	ecessary,	lectures	s and seminal	rs can b	be com	bined (li	ve and
-		onlii	ne) or cor	npletely	onlin	e via e	learning pla	atforms (Google	Meet) up to n	naximur	n of 20)%.	
Teaching		Теас	ching, inte	eractive	and a	ctive-e	xperiential							
methods					-			. /: .: .		N				
			Turne of u		ly	pes of	assessmen	t (indicate	e - Bold)	T	f		
midtorm	comi	nar	Type of p	pre-exar	ninatio		ation	.	othor	writtop	Туре	oral	am prov	etical
materin	nan	nar er	essay/re	eport	pra	clical			other	exam		exam	prac	LILAI
	pup			A	llocati	on of F	CTS credits	and shar	e in the	grade		слатт		
Stude	nt obl	igatic	ons	Le	arning	2	Hours	of work	oad	Share ii	n ECTS		Share in a	grade
				outc	ome co	ode								.
Atter	nding	classe	es					45		1.	5			
S	Semina	ars		IU-MF	MSE11	06-1		5		0.1	15			
				IU-MF	MSE11	06-2								
IU-MFMSE1106-3 Pre-exam/Written exam IU-MFMSE1106-1 10 0.35 100%														
Pre-exam/ Written exam 10-MFMSE1106-1 10 0.35 100% IU-MFMSE1106-2														
IU-MFMSE1106-3														
In total 60 2 100%														
					M	ethod	of calculati	ng the fin	al grade	2				
The final gr	ade is	the s	success ac	chieved	in the	writte	n exam.				1		_	
Literature			Title	,	Ed	ition		Lan	guage	1		Type of	f literatur	e
(indicate)	((title,	author, y	/ear)	own	other	croatian	english	other	multilingual	book	article	script	other
Compulsory	y He	alth		Care		х		х			х			
	Ec	onon	nics, J. B.	Davis										
	an	0 I 17	R. MCN	laster,										
Additional	20	ture	notes		v			v						×
Additional		cture	notes		^			^						^
Additional	COURSE	info	rmation											l
	s in H	ealth		anizatio	n and	health	economics	contain 4	15 hour	s and consist o	of 15 te	aching	units Fa	ch unit
has 2 hours	oflec	tures	s. 1 hour c	of semin	arsto	check	and determ	ine the kr	nowlede	e and exercise	es for th	ne prac	tical appl	ication
of acquired	know	ledge	e through	the pre	esenta	tion of	a SWOT an	alysis of t	he sele	cted health in	stitutio	n.	ciea: app.	
		0	0	•				,						
During sem	inars,	stud	ents will a	actively	partici	pate ai	nd discuss a	bout give	n thema	atic unit, for w	hich the	ey have	e to be pr	epared
through the	e semi	inar p	presentati	ion. The	y will	be divi	ded in grou	ps of 3-5	studen	ts and will ha	ve to m	ake th	eir presei	ntation
in the Powe	erPoin	t mo	dule.											
		•••												
Ine writter	n exan	n will action	be neid i ac with m	n pre-ex	am ar	ter He	aith care or	ganizatio	n and n is alway	ealth econom	nos lecti	ures na	ve been (n (grado	ione.
sufficient)	the st	uden	t must an	swer 55	% of t	he que	stions corre	ectly i e	must o	btain at least	28 noin	ts	ii (giaue	
According t	the st	Rulet	oook on s	tudving	at the	Unive	rsity of Mos	star. grad	es are a	ssigned as fol	lowing:			
0-54% insut	fficien	t (1);		, 0			,	, 0		0	0			
55-66% suf	ficient	: (2);												
67-78% goo	od (3);													
79-90% (ve	ry goo	od 4);												
91-100% ex	celler	nt (5).												
The final an	ada a		onto the		achia	+ م. ام	howrittor	ovarr						

The final grade represents the success achieved in the written exam.

Study	MEDICAL STUDIES II	N ENGLISH										
programme		Tuno	GLISH									
Cycle Study track	INTEGRATED	Nodula	UNIVERSITY									
Study track	-	Nodule	-									
Year of study	6	Semester	XII									
Course title	CLINICAL PHARMACOLOGY	Course code	MFMSE1201									
ECTS	2	Status	OBLIGATORY									
	Teaching hours		Lectures	Exercises	5	Seminars	Practice					
			10	15		15	0					
Course objectives	The goal of this cound discovering and dev the use of the drug acceptable ratio of e Learning outcome (I	rse is for med eloping new in the accept effectiveness LO)	dical students to acquire i drugs and the rational us red indication, at the right and harm, quality and pl	basic knowled se of drugs. Th t time, during harmacoecond	ge abo ne ratio the ap omic a Cou	out the proce onal use of dr opropriate pe spects (not o rse learning	iss of rugs implies riod, with an nly prices). LO code at the					
Course	Student:		outcome code study program									
outcomes	Describes and explane new drugs.	ains the proc	Decess of development and research of IU-MFMSE1201- 1 IU-MSE1 IU-MSE7 IU-MSE12									
	Describes and explored on the second	plains the	general principles of o	drug action	IU-M 2	FMSE1201-	IU-MSE1 IU-MSE5					
	(pharmacodynamics).	the basics	rate of the drug in the body 2 IU-NSE7									
	describe the most in	nportant side	e effects and interactions				IU-MSE11					
	Explains the	basics	of pharmacoeconomics and IU-MEMSE1201- IU-MSE7									
	pharmacoepidemio	logy.	3 IU-MSE12 IU-MSE13									
	Lists and describe	s the use o	of dietary supplements	and herbal	IU-M	FMSE1201-	IU-MSE1					
	preparations and ex	plains the ba	isics of toxicology.		4		IU-MISE5 IU-MSE6					
							IU-MSE11					
			11 1			514654204	IU-MSE13					
	Describes and expla	iins individua	lized treatment and the	use of drugs	10-M	FMSE1201-	IU-MSE1 IU-MSE5					
	in special groups						IU-MSE11					
							IU-MSE12					
							IU-MSE13					
	Describes and expl describe the guideli	ains the bas ne writing pr	ics of evidence-based m ocess.	edicine and	IU-M 6	FMSE1201-	IU-MSE7 IU-MSE9 IU-MSE10					
							IU-MSE11					
							IU-MSE12 IU-MSE13					
							IU-MSE21					
	States and describe	es the princip	ples of treatment of sele	cted clinical	IU-M	FMSE1201-	IU-MSE1					
	conditions.				7		IU-MSE5					
							IU-MSE10					
							IU-MSE11					
							IU-MSE12					
	<u> </u>				I		IU-IVISE13					
Prerequisites for the course enrolment	In accordance with t	he Rulebook:	on the Integrated Studie	s at the Schoo	ol of M	edicine Unive	ersity of Mostar					
	Week / shift	То	pic									
Course	Week 1	Dr	ug development and regu	llation,								
content		Cli	nical pharmacokinetics,									
		Ph	armacodynamics,									
		Ph	armacoeconomics,									

					Pha	rmacoepidemiol	ogy,			
					Dru	g biotransformat	ion,			
					Adv	erse drug reactio	ons and intera	ctions,		
					Indi	vidualization of o	lrug therapy,			
					Diet	ary and herbal s	upplements,			
					Gen	eric and OTC dru	ıgs,			
					Biol	ogical drugs,				
					Basi	ics of toxicology,				
					Evic	lence-based med	licine and clini	ical guidelines,		
					Con	nmon pediatric c	onditions,			
					Ant	imicrobial drugs,				
					Age	nts Used in Card	iac Arrhythmia	as,		
					Trea	atment of hypert	ension,			
					Irea	atment of ischem	lic heart disea	se,		
					Ant	iplatelet and anti	coaguiant the	erapy,		
					Trea Llyn	alinemic drugs a	allure, nd troatmont	of poriphoral ar	torial dic	0200
					Пур	atment of diabet			lenai uis	ease,
					Trea	atment of asthm				
					Trea	atment of anaphy	/laxis			
					Trea	atment of gastroi	intestinal dise	ases.		
					Anx	iolytics and hypn	otics	,		
	-	Wee	k 2		Trea	atment of depres	sive disorders	,		
					Trea	atment of schizo	phrenia and of	, ther psychotic d	isorders,	
					Trea	atment of comm	on neurologic	conditions,		
Pain treatment,										
					Glue	cocorticoids,				
					Hor	mone replaceme	nt therapy,			
					Oste	eoporosis treatm	ent,			
					Sup	portive care in o	ncology,			
					Mee	dical research,				
					Hea	Ith and medicine	databases			
Language		Engli	sh							
E-learning		Class	ses are tal	ken in	person. If nec	essary, lectures,	seminars and	part of the exer	cises car	n take place
		com	bined (live	e and c	online) or con	pletely online vi	a e-learning p	latforms (Googl	e-Meet)	up to a
Teeshine		maxi	mum of 2	.0%.						
reaching		reac	ning, part	icipato	bry and intera	ictive				
methous					Typos of	accossmont (ind	icato Bold)			
			Type of n	ro-ova	mination obli	assessment (inu	icate - Bolu)	т	ivne of ev	vam
midterm	semi	nar	essav/re	nort	practical	nroject task	other	written	oral	nractical
materin	pan	er	cssuy/re	port	practical	project task	other	exam	exam	practical
	pap			A	Ilocation of E	CTS credits and s	share in the gr	ade	exam	
Stude	nt obl	igatio	ns		earning	Hours of v	vorkload	Share in EC	TS	Share in grade
		0	-	out	come code				-	0
Class a	ttend	ance a	and			40)	1,3		
en	gager	nent								
Pre-exar	n/Wri	tten e	exam	IU-N	IFMSE1201-1	20)	0,7		100%
				IU-N	IFMSE1201-2					
					IFMSE1201-3					
				IU-N	1FIVISE1201-4 1FMSF1201-5					
				IU-N	IFMSE1201-6					
				IU-N	IFMSE1201-7					
		l	n total			60		2		100%
					Method	of calculating the	e final grade			
The exam is	writt	en. Ao	ccording t	o the	Regulations o	n studying at the	University of	Mostar, grades	are assig	gned as follows:
0-54% insut	ficien	t (1)								
55-66% suf	ficient	: (2)								

67-78% good	(3)											
79- 90% (very	/ good 4)											
91-100% excellent (5)												
Literature Title Edition Language Type of literature												
(indicate)	(title, author, year)	own	other	croatian	english	other	multilingual	book	article	script	other	
Compulsory Bertram G. Katzung: x x x Basic and Clinical Pharmacology, 14th x x x												
Additional	Lecture notes		х		х						х	
Additional co	Additional course information											
All students are required to attend lectures regularly (as prescribed by the teaching regulations), and records will be kept about them.												

Study	MEDICAL STUDIES IN EI	NGLISH										
programme			1									
Cycle	INTEGRATED	Туре	UNIVERSITY									
Study track	-	Module	-									
Year of study	6	Semester	XII									
Course title	CLINICAL ROTATION: INTERNAL MEDICINE	Course code	MFMSE1202									
ECTS	5	Status	OBLIGATORY									
	Teaching hours		Lectures	Exercises	Seminars	Practice						
	1		0	100	20	-						
Course objectives	Course objectives are: - to provide the diagnostics an - to promote po patients, college	medical stu d treating in sitive attitue agues and co	dents with adequate k ternal diseases. des that are important p-workers in the medic	nowledge about c for medical stude al field.	auses, clinical pi	cture, cation with						
	Learning outcome (LO)				Course	LO code at						
Course	Student:				learning	the study						
learning					outcome	program						
outcomes					code	level						
	Describes and relate manifestations of inter treatment of diseases.	es knowled rnal disease	owledge about pathological and clinical IU- seases and applies it in the diagnosis and MFMSE1202-1									
	Describes and difference cardiovascular resuscita dyspnea, gastrointestir hematological and imm their management and	entiates sp ation, acute nal bleeding, unological d referral.	ecific internal condi chest pain, endocrine s , renal failure, liver fai liseases, and suggests t	tions such as system diseases, lure, poisoning, he algorithm for	IU- MFMSE1202- 2	IU-MSE5 IU-MSE10 IU-MSE11 IU-MSE15						
	Describes and applies the examinations that are diagnosis, as well as for	he protocols warranted the treatme	and algorithms of the for the integration c ent of the patients.	procedures and of a differential	IU- MFMSE1202- 3	IU-MSE10						
	Demonstrates the skill of to superiors and the ab medical personnel.	of presenting ility to work	g the case of internal m in a team with other m	edicine patients nedical and non-	IU- MFMSE1202- 4	IU-MSE14 IU-MSE17 IU-MSE18 IU-MSE19						
	Describes and applies treatment and the applies	knowledge roach to pat	e about emergency co ients.	onditions, their	IU- MFMSE1202- 5	IU-MSE10 IU-MSE11 IU-MSE12						
Prerequisites for the course enrolment	In accordance with the	Rulebook or	the Integrated Studies	s at the School of	Medicine Univer	sity of Mostar.						
	Week / shift	Торіс										
Course	Seminars	(S1) C	Cardiopulmonary resusc	itation. Emergend	cy patient access							
content		(S2) A	Acute coronary syndron	ne								
		(S3) H	lypertension crisis									
		(S4) C	Cardiac insufficiency									
		(S5) D	S5) Diabetes mellitus with acute and chronic complications									
		(S6) T	hyroid diseases									
		(S7) A	cute and chronic renal	insufficiency								
		(S8) G	Gastrointestinal bleedin	g								
		(S9) L	iver cirrhosis and comp	lications								
		(S10)	Pancreatitis									
		(S11)	Liver failure									
		(S12)	Pulmonary embolism									
		(S13)	(S13) Respiratory insufficiency and gas analysis									
		(S14)	Approach to a hemato	logy patient								
		(S15)	Anemia									

					(S14)	Fever								
					(S15)	SLE								
					(S16)	Intestinal in	nfectior	าร						
					(S17)	CVI								
					(S18)	Approach t	o a pat	ient with	ca	ncer				
	-				(S20)	Poisoning					· .			
	Exe	rcises			Practi	cal work v	vith pai	tients un for Intor	der	r supervisio	n in di	tterent	: organizi	ational
					"inter	al Depart	scions'	"	IIdi	Diseases	anu u	uner u	lepartifie	
Language	Eng	lish			inter		23310113	•						
E-learning	Not	applicabl	e.											
Teaching	Теа	ching, inte	eractive	e and ac	tive-exp	periential								
methods		0,												
				Ту	pes of a	assessment	(indica	ite - Bold)					
		Type of	pre-ex	aminati	on oblig	gation					Тур	e of exa	am	
midterm	seminar	essay/r	eport	pra	ictical/p	project task		other		written		oral	prac	ctical
	paper				(= 0					exam		exam		
Ctudou			Leen	Allocatio	on of EC	TS credits	and sha	are in the	gra	ade Chara ir	ГСТС		Thoma in a	-un din
Studen	t obligati	ons	Lear	ning out	come	Hour	s of wo	гкюаа		Share in	LECIS		snare in g	grade
Atten	ding class		IU-N/	IEMSE12	202-4		120			Д			0%	
Atten			IU-N	IFMSE12	202 4		120						070	
			IU-N	IFMSE12	202-2									
Sem	inar pape	er	IU-N	IFMSE12	202-3		10			0,3	3		50%	
			IU-N	IFMSE12	202-4							3070		
			IU-N	IFMSE12	202-5	+ 5								
			IU-N	IFMSE12	202-1									
December	// / /		IU-N	IFMSE12	202-2	20				0.0	-		F 00/	
Pre-exam	/written	exam			202-3		20			0,6	/		50%	
			10-IV		202-4									
		In total			-02 5	150 5							100%	/ 0
				M	ethod o	of calculatin	g the fi	inal grade) J			I		
Evaluation is	s descript	tive.												
Literature		Title		Ed	ition		La	anguage				Type of	^f literatur	re
(indicate)	(title	, author, y	year)	own	other	croatian	english	n other	r	nultilingual	book	article	script	other
Compulsory	James	on JL et al			х		х				х			
	Harris	on's Pricip	les											
	of Inte	ernal												
	Medic	ine.20 th												
	Editio	n, McGrav	V-											
	Hillpro	ofessional,												
	2018.													
	South	wick F.			х		х				х			
	Infecti	ous												
	diseas	es: a clinio	cal											
	short	course. 4 t	th											
	editio	n, McGrav	v-											
	Hill 20	20.												
	Simon	Simon RP,Aminoff MJ, x x x x												
	Green	berg DA. (Clinical											
	Neuro	logy.	10th											
	Editio	n. New	York:											
	Books	N/McGraw	Hill											
	2018.0	course.	4 th											

edition, McGraw-Hill 2020.											
Additional Power Point x x											х
presentations and											
handouts											
Additional co	urse information										
The course Cl	linical Rotation: Internal N	Medicin	e contai	ns 120 hou	urs and is	taken c	over 3 weeks.				
The exam cor	nsists of two parts: semin	ar work	and wri	tten exam	. Conditio	on that :	should be fulf	illed in	order to	take th	e
exam is a certificate of regular attendance (exercises and seminars), 20% of absence is allowed. Students must submit a											
seminar in a written form and give an oral presentation during the course. The Written exam consists of five described											
topics addressed at seminars. The result of the exam is recorded descriptively (as passed or failed).											

Study		MEDICAL STUDIES	IN ENGLISH	l								
programm	e		_									
Cycle		INTEGRATED	Туре	UNIVERSITY								
Study track	(-	Module	-								
Year of stu	dy	6	Semester	XII								
Course title	e	CLINICAL	Course	MFMSE1203								
		ROTATION:	code									
ГСТС			Status									
ECIS			Status	UBLIGATORY		г.	· · · · · · · · · · · · · · · · · · ·	Constructor	Drastias			
	I	leaching nours		Lectures		E)		20	Practice			
Course	•	The sime of the co		0			100	20				
ohiectives		- train students to	uise are. recognize e	mergency surgical o	onditio	าทร						
objectives		- acquaint student	s how of pre	epare a patient for e	emerge	encv sur	gical procedu	ıre				
		- acquaint student	s with emer	gency surgical tech	niques	and wo	und treatme	nt				
		Learning outcome	(LO)					Course	LO code at the			
Course		Student:						learning	study program			
learning	-	Knows the structu	ro of the Cli	nic for Surgery the	nrincin	loc of u	0 vork in II	utcome code				
outcomes		the polyclinic in s	ne of the Cill	nic for Surgery, the	princip le dena	irtment	in N	,- IFMSE1203-1	IU-MSE12			
		sterilization and in	the operati	outpatient clinics, in the department, in wirwser205-1 10-wiser2								
		Adequately takes t	he medical	history and status of	of a sur	gical pa	tient IL	J-	IU-MSE6			
		and performs surg	ical triage.	ge. MFMSE1203-2								
		With supervision,	performs wo	ork at emergency su	urgical	admissi	on, in 🛛 IL	J-	IU-MSE5			
		the surgical clinic a	and assists in	sists in surgical procedures. MFMSE1203-3 IU-MSE6								
				IU-MSE7								
				IU-MSE9 IU-MSE10								
	-	Treats the wound	primarily an	nd secondarily.			IL	J-	IU-MSE10			
	-						N	IFMSE1203-4				
		Sets an immobiliza	tion and pla	aster bandage, place	es urina	ary cath	ieter, IL	J- IFMSF1203-5	IU-MSE10 III-MSE11			
	-	Knows the basic si	rgical tech	niques and principle	s in or	thonedi	rs and II	-	IU-MSE10			
		traumatology, neu	rosurgerv. o	otorhinolaryngology	and o	phthaln	nology. N	, IFMSE1203-6	IU-MSE11			
			0- //				07		IU-MSE14			
Prerequisit	es	In accordance with	the Rulebo	ok on the Integrate	d Studi	es at th	e School of M	edicine Unive	ersity of Mostar.			
for the cou	irse											
enroiment		Wook / shift	т	ionic								
Course		Seminars	I	cute abdomen								
content		Serminars	P	rimary wound close	ire							
			E	mergencies in abdo	minal	surgerv						
			E	mergencies in thora	acis sur	gery						
			E	mergencies in vascu	ular sur	rgery						
			В	suras and frostbites								
			Р	olytrauma								
			E	mergencies in ortho	opedic	surgery						
			E	mergencies in neur	osurge	ry						
	_		C	JRL emergencies				al maille traile				
Language		Exercises	P	ractical work in the	emerg	ency de	epartment an	u walk-in clin	ics			
E-learning		Classes are taken i	n nerson e	-learning is not ann	icahle							
Teaching		Teaching, practical	work	icarining is not appl	icubie.							
methods												
			Туре	s of assessment (in	dicate -	Bold)						
		Type of pre-ex	amination	obligation				Type of exa	m			
midterm	semin	ar essay/report	practio	practical/project task other written oral practical								
	раре	r					exam	exam				

		A	llocati	on of E	CTS credits	and shar	e in the	grade					
Student	obligations	Le	earning	g	Hours	of workl	oad	Share in	ו ECTS	Sł	nare in g	rade	
		outc	ome co	ode									
Attending	seminars with	IU- MF	MSE12	03-1									
enga	gement	IU- MF	MSE12	03-2		20		0,	7		0%		
	Bernent	IU- MF	MSE12	03-6									
				03-1									
Attending	practice with			03-2									
practical	work under	IU- MF	MSE12	03-4		100		3,	3		0%		
supe	ervision	IU- MF	MSE12	03-5									
		IU- MF	MSE12	03-6									
		IU- MF	MSE12	03-1									
		MSE12	03-2	20									
Pre-exam/F	inal oral exam	MSE12	03-3	30			1			100%			
i i e exampl		MSE12	03-4	30			-			100/0			
	IU- MFMSE IU- MFMSE												
	In total	-IVISE12	03-6		150			5 100%					
	III LOLAI	N./	athoda	af calculati	150	alarada				100%)		
Final avam in						ng the lin	algraue	2					
Final exam is	oral. descriptive 20% a	ttondar	aca of	cebodul	ad course	mattaric	mandat	ton					
Literature		ittenuai		ition			manua	lory.		Tupo of I	itoratur	•	
(indicato)	(title outbor)	(00r)	EU	luon		Ldfi	guage	and the second	la a a la	Type of I	iteratur	e	
(indicate)	ndicate) (title, author, year) ompulsory Doherty, G. M. (2020)				croatian	englisn	other	multilingual	DOOK	article	script	other	
Compulsory	ompulsory Doherty, G. M. (2020) Current Diagnosis and					х			х				
	Current Diagnos	sis and											
	Treatment Su	irgery,											
	15th Edition, Mo	:Graw-											
	Hill Education.												
Additional	Townsend, C.	м.	х			х			х				
	(2021). Sa	biston											
	Textbook of Sur	gery E-											
	Book: The Bio	logical											
	Basis of N	lodern											
	Surgical Pr	actice,											
	Elsevier	Health											
	Sciences.												
	Blom A, Warw	ick D,	х			х			х				
	Whitehouse	M:											
	Apley& Solo	mon's											
	System	of											
	Orthopaedics												
	and Trauma,	CRC											
	Press, 2017.												
	Becker W, Nau	umann	х			х			х				
	HH, Pfaltz	CR,											
	Behrbohm H. Ear,												
nose, and throat													
	diseases with head												
	and neck surger	ry. 3rd											
	edition. Stuttgar	t <i>,</i> New											
	York: Thieme, 20	009.											
Additional co	urse information												
	Iditional course information										al rotati	ion	

Study programme	MEDICAL STUD	IES IN ENGLISH	1											
Cycle	INTEGRATED	Туре	UNIVERSITY											
Study track	-	Module	odule - emester XII											
Year of study	6	Semester	XII											
Course title	CLINICAL ROTATION: PEDIATRICS	Course code	MFMSE1204											
ECTS	5	Status	OBLIGATORY											
	Ceaching hours		Lectures	Exercises	Seminars	Practice								
			0	100	20	0								
Course objectives	Course objectiv To achieve prac understanding critical evaluation and their comp	es are: tical knowled the pathophys on of laborato lications.	ge of pediatrics. Expand th iological mechanisms, clini ry findings and rational tre	e knowledge ical symptom atment of th	and skills n s, differenti e most com	ecessary for al diagnostic conclusions, mon pediatric diseases								
	Learning outcor	me (LO) Stude	nt:	Course lear outcome co	ning ode	LO code at the study program level								
	Conducts medio taking and phys for diagnosis.	cal interview, o ical examinati	comprehensive history- on to obtain information	IU-MFMS	6E1204-1	IU-MSE14								
Course learning	Critically judges mechanisms, cl treatment and pediatric disea	and explains pathophysiological IU-MSE11 nical and laboratory features, IU-MFMSE1204-2 revention of the most common IU-MSE15												
outcomes	Explains and int	erprets the et ns in children	erprets the etiological factors of IU-MFMSE1204-3 IU-MSE5											
	Evaluates all of adequate thera patient should l	the data in or py for a child be referred to	der to determine or to decide where a	IU-MFMS	6E1204-4	IU-MSE15								
	Lists and classif conditions in pe therapeutic app	ies by importa ediatrics and re proach	nce emergency ecommends a	IU-MFMS	E1204-5	IU-MSE10								
Prerequisites for the course enrolment	In accordance v Mostar	vith the Ruleb	ook on the Integrated Stud	lies at the Sch	nool of Med	icine University of								
	Week / shift			Τορίς										
		The febrile c	hild. Serious life-threatenir	ng infections										
		Vomiting ac	ute abdominal pain. dehvo	Iration.										
	Week 1	Neonatal iau	indice. neonatal infection											
		Immunisatio	n											
		Syncope, car	diac arrhythmias, chest pa	in.										
Course		The seriously ill child, shock												
content		Anaphylaxis,	Asthma											
	Week 2	Diabetes me	llitus, Diabetic ketoacidosi	s										
		Epilepsies of	childhood, febrile seizures	5										
		Urinary tract	infection, Enuresis. Protei	nuria, Haema	aturia									
		Haematolog	ical disorders- anemia.	,										
	Week 3	Respiratory	infections											
	Developmental problems and the child with special needs.													
Language	l	Developmental problems and the child with special needs. English												

E-learning	E-learning Classes are taken in person, e-learning is not applicable.													
Teaching m	ethods		Теа	ching, i	nteractive a	ind act	tive-ex	perie	ntial					
				Ту	pes of asse	ssmen	t (indio	ate -	Bold)					
	Туре	of pre-ex	amina	tion ob	ligation					Type of	f ex	am		
midterm	seminar paper	essay/i	report	pra	ctical/proje task	ect	other		written exam	o e>	oral kam	n	pr	actical
				Allocati	on of ECTS o	credits	and sh	nare i	n the grade					
Student ob	igations						Learnir	ng ou	tcome code	Hours o workload	f d	Share in ECTS	sh	iare in grade
Class attend the practica	dance and e al exam	engageme	ent wit	th prepa	arations for					120		4		10%
IU-MFMSE1204-2														
Pre-exam/Written exam IU-MFMSE1204-3 20 0,7 45%														
IU-MFMSE1204-5														
Pre-exam/Practical exam IU-MFMSE1204-1 10 0,3 45%														
							IU-N	/FMS	SE1204-4					
In total										150		5	1	.00%
	1 1 1		C + 1	M	ethod of ca	lculati	ng the	final	grade					
The final gr	ade is the a	verage of	f the w	ritten (Case report	:) and	practic	al gra	ides. Evaluatio	on is descr	ipti	ve.		
Literature	Titl	le	Edit	ion			Langua	age	1		Ту	pe of li	teratur	2
(indicate)	(titi auth yea	e, lor, c lr)	own	other	Croatian	Engli	sh c	ther	multilingual	l book	a	rticle	script	other
Compulsory	Lissauer, Tom; Carol Will, Illustrated textbook of pediatrics, London 6th edition: 2021 x x x													
Additional	course infor	mation												
Students ar the class ar grade is the	itudents are obliged to regularly attend and actively participate in all forms of classes. The exam in Pediatrics is taken after he class and consists of a written (case report) and practical (patient examination with interpretation) part. The final grade is the average of the grade of the written and practical exam. Evaluation is descriptive.													

Study	MEDICAL STUDIES	IN ENGLISH											
programme		Tour											
Cycle	INTEGRATED	Туре	UNIVERSITY										
Study track	-	Module	-										
Year of study	6	Semester	XII										
Course title	CLINICAL	Course	MFMSE1205										
	ROTATION:	code											
	GYNECOLOGY												
ECTS	5	Status	OBLIGATORY										
	Teaching hours		Lectures	Exercises	Seminars	Practice							
	L		0	100	20	-							
Course	- to introduce stu	dents to the o	rganization of antenatal	l, perinatal and po	ostnatal care and	consequently							
objectives	the movement of	perinatal and r	maternal mortality.			6							
	- to introduce stud	dents to the av	vailability of care during	pregnancy and ch	hildbirth, as well a	is care for the							
	mother and fetus	(newborn)	donts in the field of rom	raduativa haalth		ducation and							
	family planning a	owiedge of stu	ntion and early detection	on of discosos of	the reproductive	system in the							
	world and in our c	s well as pieve	ention and early detection	on of diseases of		system in the							
	- special review of	programs in th	ne promotion of women	's health									
	Learning outcome	(LO)			Course	LO code at							
Course	Student:	()			learning	the study							
learning			learning the study outcome code program										
outcomes						level							
	- Recognize	es the importa	nce of a high-level healt	h care during	IU-MFMSE1205-	IU-MSE-4							
	pregnanc	y, as well as du	uring and after childbirth	n and explains	1								
	the mean	ing of antenat	al care in developed and	ł									
	underdev	eloped countr	ies of the world.										
	- Connects	and applies kr	nowledge regarding the	most common	IU-MFMSE1205-	IU-MSE-8							
	gynecolo	gical diseases a	and pathological condition	ons in	2								
	pregnanc	y, labor and pu	ierperium.	and childhirth.									
	- Recognize	es the importa	ance of family planning	tost) on model	3	IU-MSE-14							
	applies t	atient and inter	rnretates cytological find	dings	•	IU-MSE-16							
				6									
	- Recognize	es risk and dan	gerous factors for repro	ductive health	IU-MFMSE1205	IU-MSE-10							
	including	risk factors for	the occurrence of mali	gnant diseases	-4	IU-MSE-13							
	of the rep	productive orga	ans, their prevention and	d early		IU-MSE-15							
	detection	methods.											
	- Applies t	ne gynecologic	cal and obstetric examin	nation on model	-5	IU-MSE-14							
	anu/or pa	the plan for y	management of the year	rinal daliyany as	UL-MEMSE1205	IIII-MSE-8							
	- Develops	e third and for	indiagement of the vag	odel	-6	IU-MSE-14							
	wen as th					l							
Prerequisites	In accordance with	the Rulebook	on the Integrated Studi	es at the School of	f Medicine Univer	sity of Mostar							
for the course						,							
enrolment													
	Week / shift	Торі	c										
Course	Seminars	(S1)	Gynecological history ar	nd examination. D	iagnosis of pregn	ancy							
content													
		(S2)	Antenatal care. Differer	ntial diagnosis of c	onvulsions in pre	gnancy							
		(S3)	Preterm delivery										
		(S4)	Emergencies in obstetri	CS									
		(S5)	Pathology in the puerpe	erium									
		(S6)	Contraception. Irregular	uterine bleeding									
	Exercises	(E1-	100) Practical work unde	er supervision									
Language	English												
E-learning	Classes are condu	cted live.											
	On-line classes (if i	necessary) can	be performed through t	ne Google meet p	latform (max app	lication. 10%).							

Teaching		Teaching, interactive and active-experiential													
Types of assessment (indicate - Bold)															
Type of pre-examination obligation Type of exam															
midterm	midterm seminar essay/re			port practical/			project task other			written	written or		al practical		
paper										exam	exam exa			am	
Allocation of ECTS credits and share in the grade															
Stude	ons	Learning			Hours of workload			Share ii	Share in ECTS			Share in grade			
			outcome code												
Attending classes with preparation for the practical exam						120			4	4					
Pre-exam/Practical exam			IU-MFMSE1205-3 IU-MFMSE1205-5			20			0,	0,7			70%		
Pre-exam/Oral exam			IU-MFMSE1205-1 IU-MFMSE1205-2			10			0,	0,3			30%		
				IU-MFMSE1205-4		05-4									
In total 150 5 1009										0					
Method of calculating the final grade															
Evaluation	is des	cripti	Titlo	etalls se	e the a		nai informa	tion.	guago		[Typo of	itoratur	.0	
(indicate)	(title.	author. v	ear)	ear) own other		croatian	english	other	multilingual	book	article script		e other	
Compulsory F. Gary Cunning			nam		x		x			x					
	et all. 24th Editio			rics											
	Mc Graw-Hill		1051												
Companies, 201		4.													
Additional	Additional														
Additional	course	e info	rmation							•					
The course	Clinica	al rot	ation: Gy	necolo	gy cont	ains 12	20 hours and	d is perfo	rmed du	iring 3 weeks.	Teachi	ng consi	sts of se	minars	
and exercises. Students are required to actively participate in classes from seminars and exercises, where knowledge will be															
evaluated and continuously checked.															
The exam is taken after positive evaluation of class attendance and participations, and consists of the practical (examination															
of patients with interpretation) and oral part.															
Practical exam - students will use a clinical example to demonstrate understanding, treatment, diagnosis and therapy options for the relevant problem. The oral exam includes the most important integrative units from guadeless and															
obstetrics. The oral exam does not examine detailed but integrative knowledge, which is essential for understanding the															
entire course and medical practice.															
Evaluation is descriptive (pass/fail).															

Study	MEDICAL STUDIES IN ENGLISH											
Cycle												
Study track		Module										
Year of study	6	Semester	er XII									
Course title		Course	MEMSE1206									
course the	MEDICINE WITH	code										
	CLINICAL											
	ROTATION											
ECTS	5											
	Teaching hours	Exercises	Seminars	Practice								
Courso	The main objective	of the course	100		- nov and life							
objectives	threatening condit	tions, and with	their management.	s with the most c	ommon emerge	ncy and me-						
	Also, upgrading knowledge of the emergency situations acquired in the previous courses during the											
	practical work, with an emphasis on differential diagnosis and the latest treatment algorithms.											
	Learning outcome	(LO)		Course	LO code at							
Course	Student:				learning	the study						
			code	program level								
outcomes	Describes the triag	ge procedure i	n the emergency center/	unit in hospital	IU-	IU-MSE8						
	or primary care	MFMSE1206-1	IU-MSE9									
	patients.											
	Describes and app	olies the basic	ort procedures	IU- MEMSE1206-2	IU-IVISE10 IU-MSF11							
	under supervision	and monitors	and care.		IU-MSE12							
	Differentiates vari	ous types of sh	ock and creates treatme	ent and therapy	IU-	IU-MSE5						
	procedures.			MFMSE1206-3	IU-MSE6 III-MSE7							
	Describes and di	fferentiates sp	litions such as	IU-	IU-MSE5							
	drowning, electri	c shock, heat	MFMSE1206-4	IU-MSE10								
	poisoning, acute o	chest pain, pe		IU-MSE11 IU-MSE15								
	suggests the algor	ithm for their i										
	medical personne	ability to work	in appropriate	MFMSE1206-5	IU-MSE18							
	manner.			IU-MSE19								
						IU-MSE21						
	Demonstrates wi	th supervisio	n skills, techniques a	nd procedures	IU-	IU-MSE10						
	regarding referral	and managem	ency room.	WIFWSLIZ00-0	IU-MSE17							
				IU-MSE20								
Duran i ii			and the last of the state									
for the course	in accordance with	i the Rulebook	on the integrated Studie	es at the School of	ivieaicine Unive	ersity of Mostar.						
enrolment												
	Week / shift	Тор	ic									
Course content	Seminars	Card	Cardiopulmonary resuscitation									
		Basi	Basic life support									
		Advanced life support Rediatrics basic and advanced life support										
		Trauma life support (primary and secondary examination)										
		Drowning, electric shock, heat stroke, freezing, poisoning, choking										
	Acute Abdomen											
	Chest pain and life-threatening heart rhythm disorders											
	Hypertensive crisis Cerebrovascular insults and consciousness disorders The bleeding from the gastrointestinal and respiratory tract Septic shock pathophysiology and algorithm of treatment Anaphylactic shock pathophysiology and algorithm of treatment											

						F ire or										
						Emergency Gynecological Bleeding										
•	Exercises				Practical work with patients under supervision in emergency care units								.S			
Language		Eng	lish													
E-learning		Classes are taken in person.														
Teaching		Lecture method/Teacher-centered methods, interactive/participative methods, practical									cal wor	k with				
methods supervision in the emergency room/outpatient settings.																
Types of assessment (indicate - Bold)																
Type of pre-examination ob							gation				Type of exam					
midterm	nidterm seminar essay/re		port practical/			project task		other	writter	n	oral	pra	ctical			
	paper							exam	exam exa		xam exam					
Allocation of ECTS credits and share in the grade																
Stude	nt obli	gatio	ons	Learning		g	Hours of workload		Share i	Share in ECTS		Share in grade				
				outcome code		ode										
Attending	classe	s (se	minars	IU-MFMSE1206-1		06-1										
and exercises))	IU-MFMSE1206-5			120			4	4		0%			
		/		IU-MI	IU-MFMSE1206-6											
				IU-IVIFIVISE1206-1		06-2	15				0,5		50%			
Pre-exam / Practical scenario			scenario	IU-MFMSE1206-2						0						
				IU-MFMSE1206-5												
1				IU-MFMSE1206-2												
Pre-exam / Oral exam			xam	IU-MFMSE1206-3			15			0	0,5		50%			
			IU-MFMSE1206-4													
In total						150			1	5			100%			
					Μ	lethod	of calculati	ng the fir	al grad	e						
Evaluation	is desc	ripti	ve.													
Literature			Title		Ed	ition	Language				Type of l		literature			
(indicate)	((title, author, year)		own	other	Croatian	English	other	multilingual	book	article	script	Other			
Compulsory CF		PR guidelines				x		х						x		
•	ITL	LS guidelines				х		х						x		
Additional	Additional Power Point				x			x						x		
	Dre	esentations and			~			~								
	indouts															
Additional	course	info	rmation		1	I	1		I	<u> </u>	<u> </u>	L		1		
The exam of the course Emergency Medicine with Clinical Rotation is carried out in front of course teacher and consists of																
an oral and practical part (scenarios).																
Conditions	for ex	am a	pproach a	are a ce	ertificat	te of re	gular atten	dance (ex	ercises	and seminars	s), 20% (of absen	ce is allo	owed.		
Completed exam is recorded descriptively (as passed or failed).																
Study program	MEDICAL STUDIES IN ENGLISH															
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Cycle	INTEGRATED	Туре	UNIVERSITY													
Study track	-	Module	1-													
Year of study	6	Semester	XII													
Course title	DIPLOMA THESIS	Course code	MFMSE1207													
ECTS	3	Status	OBLIGATORY													
	Teaching hours		Lectures	Exercises	Seminars	Practice										
	-		-	90	-	-										
Course	Acquiring knowledge and skills in terms of methodology and conducting research in the field of															
objectives	medicine, as well as the thesis preparation and public presentation.															
Course learning outcomes	Learning outcome Student:	Course learning outcome code	LO code at the study program level													
	Identifies and in methodology of so own research.	IU- MFMSE1207-1	IU-MSE7													
	Independently se including and excl approach, numbe evaluates own res	IU- MFMSE1207-2	IU-MSE7													
	Describes the imp and integrates th independent writi	ortance of ethical p ese principles into ng of a request to th	tific research work ch in the form of sion.	IU- MFMSE1207-3	IU-MSE12											
	Analyzes the obtai argues the results	IU- MFMSE1207-4	IU-MSE7													
	Makes a presentat	tion of his own work		IU- MFMSE1207-5	IU-MSE20 IU-MSE21											
	Orally presents the	e results of his own	IU- MFMSE1207-6	IU-MSE20 IU-MSE21												
Prerequisites	In accordance with the Rulebook on the Integrated Studies at the School of Medicine University of															
for the course enrolment																
	Week / shift	Торіс														
Course	Teaching units	Introduct	ion to scientific v	vork												
content	Historical notes															
		Preparati	ion of the thesis writing project													
		What is a	a scientific paper													
		How to w	write a title													
		How to p	prepare a summary													
		How to w	write an introduction													
		How to w	write a materials and methods section													
		How to w	write the results													
		How to w	write a discussion													
		How to ci	cite references													
		How to fo	form effective tables													
		How to p	o prepare effective graphs													
		How to w	to write a thesis													
		Where to	submit your mai	nuscript												
	Exercises/Thesis	Independ	Independent student work in conducting research under the supervision of a													
	preparation mentor and preparation and presentation of the diploma thesis in from committee.															

Language		English														
E-learning		Classes are conducted live. If necessary, classes can be done combined (live and online) or completely										pletely				
Teaching		Teaching interactive and active-experiential														
methods																
Types of assessment (indicate - Bold)																
Type of pre-examination obligation Type of exam																
midterm seminar essay/re		essay/re	port	ort practical/proj			ect task other		writ	ten exam	exam ora		al practical			
	ei			Allocati	on of F(TS credit	IS credits and share in the grade									
Stude	ons	Lea	arning o	utcome	Ho	Hours of workload Share			hare in E	n ECTS Share in grade						
		<u> </u>			cod	e								U U		
Attending classes with																
preparation for writing the			ig the					30			1			0 %		
thesis																
Conducting research and writing the thesis under mentor's supervision			IU - MFMSE1207-1 IU - MFMSE1207-2 IU - MFMSE1207-3 IU - MFMSE1207-4				45			1,5			50 %			
				IU - N	IU - MFMSE1207-1											
Oral presentation in front of the committee			IU - MFMSE1207-3				15			0,5			50 %			
			IU - MFMSE1207-4													
			IU - MFMSE1207-5													
IU - N				VEMSE1	.207-6		00			2	100.9/		/			
In total 90 3 100 %												0				
The quality of the thesis itself and the oral presentation or public presentation of the thesis in front of the committee is																
evaluated. The committee consists of three members, one of whom is the student's mentor or commentator, and the other																
two members are faculty members, one of whom must hold the minimum rank of assistant professor. After the presentation																
of the work, each committee member questions the student about the work. The final grade is obtained on the basis of the																
sum of the quality of the thesis itself (assessed by the Commission for the Graduate Thesis with 0-50 points) and the public																
presentation	on of ti	he tr	nesis with	(asses	sed by t	the Com	imission f	or the De	tense of	the Gra	iduate Th	iesis v	with 0-50	0 points	5).	
The final a	ssessm	ient i	is carried (out aco	cording	to the R	ulebook o	on studyir	ng at the	Univers	ity of Mo	star a	and appl	ies to al	l study	
groups. According to the Study Regulations, the final grade is obtained as follows:																
R = 79 to 90% 4 (very good)																
C = 67 to 78% 3 (good)																
D = 55 to 66% 2 (sufficient)																
F = 0 to 54% 1 (insufficient)																
Literature Title			,	Edition			Language			Type of literature				e		
(indicate)	(title,	, author, y	/ear)	own	other	croatian	english	other	multiling	gual I	JOOK	article	script	other	
Compulsory Gastel B, Day R				. How												
		Scientific Paper ed. Santa Ba		viisn a · Q+h												
	ed			rbara.		х		х			2	ĸ				
California: Greenwood; 201																
		.6.														
Additional	Те	eaching materials		х			x							х		
Additional	course	e info	ormation													
The conter	nt of th	e co	urse inclu	des in	depend	ent wor	k of stude	ents unde	r the sup	pervisio	n of a me	ntor	(60 scho	ol hour	s).	
Direct teaching of 30 hours is conducted in the first week of the 6th year and aims to acquaint students with their obligations regarding the application of the tonic of the thosis, reporting the research to the othics committee and																
Unigations	regan	ung	une appill	Lauon	or the t	υρις Οι Ι	ine thesis	, reportin	8 me 185	carunt	o me em	ics cc	minute	e anu		

instructions on conducting research and writing the thesis.