

Univerzitet u Sarajevu



University of Sarajevo



Study program
One Health

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Study Programme: One Health

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1. GENERAL INFORMATION

1.1. The Name of the Programme

One Health

1.2. The Type of the Programme

Academic Programme

1.3. The Level of the Programme

Master's Degree - II Cycle Programme

1.4. The Aim of the Programme

General study objectives:

- to expand the competencies of participants in recognizing, analyzing and acting on health disorders of human and animal populations in relation to the separate starting points adopted during their undergraduate studies, and/or during their work in the formally separate systems of public health and animal health in BiH, and considering the modern a unified health approach;
- improve the knowledge and skills of participants in disciplines and sciences closely related to public health, animal health and food safety, with a special focus on internationally recognized needs for scientific foundation and cost efficiency of the process of making measures and decisions in these areas;
- point out the advantages of interdisciplinarity, in terms of better efficiency, more optimal use of resources and positioning of health issues, in a wider social and political context;
- establish a platform for better communication, informal and formal networking, and recognition of competences of other bio-medical professions, as well as the specificities of health problems that overcome the barriers of host species, geo-political borders and capacities of separate public health and animal health systems.

1.5. The Proponent of the Programme

The programme is implemented by the University of Sarajevo. The University of Sarajevo delegates the organization of the programme to the Center for Interdisciplinary Studies and also delegates the teaching to professors and assistants from several faculties of the University of Sarajevo.

1.6. Scientific/artistic Areas the Study Programme Belongs to

The study programme "One Health" is an interdisciplinary study programme that incorporates the scientific areas of biomedical and health sciences and therefore, the professors responsible for the courses come from the faculties of the University of Sarajevo which correspond with these areas. Along with the responsible professors, there are other instructors involved in the teaching process and they come from the University of Sarajevo or appear as guest lecturers from universities in the region and broader.

1.7. Organization and Duration of the Programme

The "+1" study program lasts one year (two semesters x 30 ECTS, total 60 ECTS).

The program consists of 6 compulsory subjects, 2 elective subjects, one elective practice and the preparation and defense of a Master's thesis (Final Thesis). During the first and second semesters, classes are held in English and Bosnian/Serbian/Croatian. Students do a final paper of their choice, in Bosnian/Serbian/Croatian or English.

1.8. Minimum number of ECTS Credits Required to Complete the Programme

In accordance with the European Credit Transfer and Accumulation System, the programme is valued with 60 ECTS credits per year or 30 ECTS credits per semester. The number of credits for each individual course is determined in accordance with the assigned workload (theoretical and/or practical classes, seminars etc.), the time students spend doing individual assignments (homework, projects, seminar papers etc.) and the time required for exam preparation (tests, final exam).

The final thesis is valued with 20 ECTS credits.

1.9. Language of Instruction

Classes are held in Bosnian/Croatian/Serbian and/or English.

1.10. Selection Process for the Enrollment

Student status is acquired by enrolling in a study program implemented by the Center for Interdisciplinary Studies of the University of Sarajevo. Enrollment is done on the basis of a public call published by the University, which is decided by the Senate of the University.

Enrollment in the first study year is carried out in accordance with the Law, the Statute, these rules and based on the final results of the public competition.

The University of Sarajevo publishes the call for the enrollment of students in the first year of study in at least three daily newspapers in the territory of Bosnia and Herzegovina. The call for the enrollment of students in the first year of study is published on the website and notice board of the University of Sarajevo and the Center for Interdisciplinary Studies with the prior approval of the Ministry.

The right to enroll in an interdisciplinary master's study (II cycle) is available to candidates:

- citizens of Bosnia and Herzegovina and foreign citizens who have completed the corresponding first cycle of studies in Bosnia and Herzegovina, which is evaluated with at least 240 ECTS study points, which in total with the evaluation of the second cycle amounts to at least 300 ECTS,
- who completed their studies according to pre-Bologna curricula in Bosnia and Herzegovina,
- who have completed an integrated study lasting five and/or six years, as well as
- candidates who completed the first cycle, i.e. pre-Bologna studies, outside of Bosnia and Herzegovina, and for whom, after the recognition or equivalence procedure, it was determined that they have completed adequate education to continue their education.

The unique ranking list of all registered candidates will be based on the completed study of the II cycle, four-year study according to the pre-Bologna study system, integrated study, and the average grade achieved by the candidates during their studies.

1.11. Qualifications upon Completion of the Programme After passing all the exams listed in the Curricula and defending the Final Thesis; after acquiring the full, required number of ECTS credits, and after finishing the studies, the student gets the academic title of Master of One Health.

1.12. The Analysis of Employment Possibilities After Graduation

The awarded diploma ensures that the holders can perform professional work in the field of the title assigned to them.

1.13. The Programme's Vertical Mobility

According to Article 1, paragraph (3) of the Study Rules for the I, II cycle of studies, integrated, professional and specialist studies at the University of Sarajevo, the second cycle leads to the degree of Master or equivalent after the completion of the first cycle of studies; it lasts one or two study years, and is evaluated with 60 or 120 ECTS points so that in total with the first study cycle, it carries 300 ECTS points, which ensures vertical mobility for enrollment in the third study cycle.

1.14. Grading Scale

Each individual course syllabus contains the grading scale, in accordance with the goals and outcomes of the course.

1.15. Quality Assurance

The study programme's quality and success will be assessed through internal and external observation and assessment by an official committee and the students.

2. PROGRAMME DESCRIPTION

2.1. Learning Outcomes at the Study Programme Level

General skills acquired during studies:

- knowledge of principles and tools for systematic surveillance and disease control, including disease eradication;
- knowledge of the role of analytical studies and the scientific justification of decision-making on measures to protect human and animal health;
- knowledge of the framework for creating monitoring programs, records and research of disease hotspots and other health disorders important for public health;
- knowledge of legislation and regulatory frameworks of public health at the national and EU level;
- knowledge of ethical standards and welfare assurance standards, and how to apply them in practice;
- knowledge of international organizations with competences for standardization and regulation of public health;
- knowledge of the importance of preparedness for emergent disorders of human and animal health, their nature, requirements, specificity and organizing an effective response;
- knowledge of tools for disease detection in human and animal populations, considering the importance of early diagnosis and prevention of further spread;
- knowledge of global, regional and national emergent zoonoses of various etiologies and wider social implications of their occurrence, spread and implementation of surveillance and control measures;

- knowledge of scientifically based principles, tools and systems of food safety assurance and supervision, from the aspect of various hazards (bacterial, viral, parasitic and chemical) with a polyvalent capacity of endangering the health and well-being of people, the health, well-being and production of animals and the quality of the environment;
- knowledge of the principles and assurance of biosafety in food production and processing, and the relationship of responsibility for food safety between the industry/producer, governmental supervisory authorities and the public health system;
- knowledge of the principles and requirements of accreditation of testing laboratories and analytical methods in the field of food safety;
- knowledge of principles of economics in public health;
- knowledge of the principles of teamwork, knowledge of team capacity development, outsourcing, effective communication and presentation skills;
- mastering the concepts and strategies of evidence-based decision-making in the processes of defining health policies and identifying stakeholders with an impact on health research, policy and practice;
- development of presentation skills, communication and knowledge about leadership and followership;
- understanding the principles of ethics and legislation in the field of medical ethics and deontology in the context of recognizing the ethical principles that determine the relationship between the doctor/veterinarian and the patient/client;
- improvement of skills within the framework of public health with the adoption of basic scientific and professional skills from the chosen field of the master's program.

2.2. The List of Obligatory and Elective Courses

The table 1 contains the list of courses with ECTS credits and number of hours.

Semester I	Teaching module	Hours	ECTS	Module status	Assigned professor/s
	Research, surveillance and disease control	15P/10V/5S	6	mandatory	Prof.dr. Semra Čavaljuga Doc.dr. Sabina Šerić-Haračić
	Emergent threats to public health	15P/10V/5S	6	mandatory	Prof.dr. Teufik Goletić
	Regulatory concepts of one health	15P/15S	6	mandatory	Prof.dr.Nihad Fejzić Prof.dr. Amela Džubur-Alić
	Food safety	15P/5V/10S	6	mandatory	Prof.dr.Davor Alagić Prof.dr. Mufida Aličević
	Bioethics	10P/5S	3	elective	Prof.dr. Amela Džubur-Alić Prof.dr.Nihad Fejzić
	Risk analysis	10P/5S	3	elective	Prof.dr. Nihad Fejzić Doc.dr. Sabina Šerić-Haračić
	Elective practice	15	3	mandatory	Prof.dr. Jasmin Omeragić
Overall		150	30		

Semester II	Teaching module	Hours	ECTS	Module status	Assigned professor/s
	Decision making	15P/15V/S	6	mandatory	Prof.dr. Aleksandra Nikolić Prof.dr. Aziz Šunje
	Quality assurance and laboratory biosafety	10P/5S	3	elective	Prof.dr. Davor Alagaić Prof.dr. Sadeta Hamzić
	Emergent situations in the health system: preparedness and response	10P/5S	3	elective	Prof.dr. Semra Čavaljuga Prof.dr. Teufik Goletić
	Consultations with mentor	75	15		
	Final thesis	30	6		
Overall		150	30		

2.3. Information about the Programme's Structure and the Requirements for Enrolment in the Next Semester

In the application of the European Credit Transfer System (ECTS) in the master's study proposal "One Health", the starting point is the agreement, accepted throughout the European area of higher education, that the work required to master one academic year of study amounts to 60 ECTS points. The student gets 40 ECTS points from the organized classes, and 20 ECTS points from the work on the final paper.

The program consists of 5 mandatory courses, 3 elective courses, 2 interdisciplinary workshops and the creation and defense of a Master's thesis (final thesis). During the first and second semesters, classes are held in English and BHS. Students do a final paper of their choice, in BHS or English.

Program structure:

First semester:	<ul style="list-style-type: none"> - 5 obligatory courses - 1 elective courses - 1 elective practice <p>= overall 30 ECTS</p>
Second semester:	<ul style="list-style-type: none"> - 1 obligatory course - 1 elective courses - preparation and defense of the final thesis <p>= ukupno 30 ECTS</p>

2.4. The List of Elective Courses Offered at Other Study Programmes and the Requirements for their Selection

A student can choose a course - compulsory or elective (the curriculum provides mandatory courses with 6 ECTS and 30 hours each, and elective courses with 3 ECTS and 30 hours each) from another study program if the goals and outcomes of that subject are in accordance with the aim and outcomes of this study program, by submitting an application to the Council of the Center with accompanying documentation, i.e. the syllabus of the course they wish to choose/listen to.

2.5. Completion of the Programme

The student will complete the studies by passing all the exams and writing the final thesis. The student chooses their thesis supervisor based on their interest and the instructor's research area. The thesis topic must be closely connected with the area of nutrition. The possible topics for final theses are suggested by the professors. However, the student can suggest their own thesis title to the professor they wish to work with.

The thesis supervisor can also be an instructor who has not been teaching at the specialist study, but the thesis topic is related to the programme's field. The suggested professor needs to possess adequate skills and competencies in order to be a thesis supervisor. The choice of the thesis supervisor is approved by the Academic Council of the Center for Interdisciplinary Studies.

The students submit their thesis applications on the prescribed form. After the application's approval by the Council, the Council forms the Thesis Defence Committee. The members of the Committee must be professors ranging from the assistant professor to full professor. The Committee consists of the president and two members, or their substitutes. One of the members of the Committee is the thesis supervisor.

The student may change the topic of their thesis once, at the latest 30 days after the approval of their first topic. The students defend their theses with the public presentation.

All the other issues pertaining to the organization of the classes and the study programme – the students' rights and obligations, application process and the enrolment – shall be regulated by the Law, the Statutes, the Rules for the First and the Second Cycle, the Integrated Study Programmes, Professional and Specialist Study Programmes at the University of Sarajevo.