



**MEDICINE AND SOCIETY**

**SIXTH YEAR OF STUDIES**

school 2023/2024.

**HYGIENE AND ECOLOGY**

**Course unit:**

## HYGIENE AND ECOLOGY

The course is evaluated with 6 ECTS. There are 6 hours of active classes per week (4 hours of lectures and 2 hours of work in a small group).

**Teachers::**

No	Name	Email	Title
1.	Prof. dr Nela Đonović	ndjonovic@medf.kg.ac.rs	Full професор
2.	Doc. dr Marija Sekulić	msekulic82@gmail.com	Assistant professor
3.	Doc. dr Dalibor Stajić	stajicdalibor@yahoo.com	Assistant professor
4.	dr Nikoleta Janićijević	nikoleta.janicijevic@gmail.com	facilitator

**COURSE STRUCTURE:**

Module	Name of module	week	Weekly lectures	Work in a small group per week	Teacher-head of the module
1	Communal hygiene, ecology, ecotoxicology	4	4	2	Prof. Dr Nela Đonović Doc. dr Marija Sekulić
2	Nutrition	7	4	2	Prof. Dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić
3	School hygiene, occupation hygiene, mental hygiene, sanitary hygiene, hygiene in emergency situations, general hygiene	4	4	2	Prof. Dr Nela Đonović Doc. dr Dalibor Stajić
					$\Sigma 60+30=90$

## ASSESSMENT:

The student masters the course by modules. The grade is equivalent to the number of points earned (see tables). Points are earned in three ways:

**ACTIVITY DURING THE LESSON:** In this way, the student can earn up to 15 points by answering 2 exam questions from that week of class in the last class of work in a small group and, in accordance with the demonstrated knowledge, earns a total of 0 - 1 points.

**COLLOQUIUMS:** In this way, the student can gain up to 20 points.

MODUL		Maximal poents		
		Activity during classes		
1	Communal hygiene, ecology, ecotoxicology	4		4
2	Nutrition	7		7
3	School hygiene, occupation hygiene, mental hygiene, sanitary hygiene, hygiene in emergency situations, general hygiene	4		4
4	Colloquiums			20
5	Oral exam			65
<b>Σ</b>		<b>15</b>		<b>100</b>

**CONSULTATIVE TEACHING:** Consultations are held every week on Fridays from 12:00 to 2:00 p.m. and can be scheduled with the head of the course, prof. dr. Nela Đonović (ndjonovic@medf.kg.ac.rs)

### The final grade is formed as follows:

In order to pass the course, the student have to obtain a minimum of 51 points and pass all modules. To pass the module, the student must:

1. obtains more than 50% points in that module
2. acquires more than 50% of the points provided for the activity in class in each module
3. pass the module test, have more than 50% correct answers.

Total number of points	Description	grade
0 - 50	Not passed	5
51 - 60	Six	6
61 - 70	Seven	7
71 - 80	Eight	8
81 - 90	Nine	9
91 - 100	Ten	10



## LITERATURE:

Modules	the name of the textbook	authors	publisher	library
1,2,3	<ul style="list-style-type: none"> <li>• Oxford Textbook of Global Public Health Oxford:</li> <li>• Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. Geneva:</li> <li>• Guidelines for drinking – water quality. 3rd ed. Geneva:</li> <li>• WHO. Monitoring ambient air quality for health impact assessment. Copenhagen: WHO Regional Publications, European Series, No. 85; 2003.</li> <li>• Hand Hygiene. WHO guidelines on hand hygiene in health care. Geneva:</li> <li>• Diet, nutrition and the prevention of chronic disease. Geneva:</li> <li>• Burden of disease from environmental noise. Quantification of healthy life years lost in Europe. Geneva:</li> <li>• Promoting mental health: concepts, emerging evidence, practice : summary report / a report from the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. Geneva:.</li> </ul>	Detels R, Karim QA, Baum F, Li L, Leyland A. WHO WHO WHO WHO WHO WHO	Oxford University Press; 2009. World Health Organization; 2016. World Health Organization, 2011. WHO; 2009. WHO Technical Report Series 916; 2003. World Health Organization; 2011. World Health Organization; 2004	

All lectures are available on the website of the Faculty of Medical Sciences: [www.medf.kg.ac.rs](http://www.medf.kg.ac.rs)

**PROGRAM:**

**FIRST MODULE: HYGIENE, ECOLOGY, ECOTOXICOLOGY**

**TEACHING UNIT 1 (FIRST WEEK):**

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Introduction to hygiene, atmosphere, influence on health:

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lectures 4 hours	exercises 2 hours
Introduction to ecology; Atmosphere – impact on health;	<ul style="list-style-type: none"><li>• Introduction to ecology – practical aspects; Atmosphere – impact on health – practical aspects;</li></ul>

**TEACHING UNIT 2 (SECOND WEEK):**

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Climate, microclimate, noise, vibrations, radiation – impact on health

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lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"><li>• Climate, microclimate, noise, vibrations, radiation – impact on health;</li></ul>	<ul style="list-style-type: none"><li>• Climate, microclimate, noise, vibrations, radiation - impact on health – practical aspects;</li></ul>

**TEACHING UNIT 3 (III WEEK):**

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Drinking water – impact on health; Waste materials – impact on health

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lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"><li>• Drinking water – impact on health; Waste materials – impact on health; Soil</li></ul>	<ul style="list-style-type: none"><li>• Drinking water – impact on health – practical aspects; Waste materials – impact on health – practical aspects; Soil – practical aspects;</li></ul>

**TEACHING UNIT 4 (IV WEEK):**

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Ecotoxicology; Environmental poisoning

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lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"><li>• Ecotoxicology; Environmental poisoning</li></ul>	<ul style="list-style-type: none"><li>• Ecotoxicology – practical aspects; Environmental poisoning – practical aspects;</li></ul>

**SECOND MODULE: NUTRITION**

**TEACHING UNIT 5 (V WEEK):**

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Food hygiene: introduction and nutrition, foodstuffs, macronutrients

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lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"><li>• Food hygiene: introduction and nutrition, foodstuffs, macronutrients</li></ul>	<ul style="list-style-type: none"><li>• Food hygiene: introduction and nutrition, foodstuffs, proper nutrition – practical aspects</li></ul>

**TEACHING UNIT 6 (VI WEEK):**

Nutrients, Micronutrients-vitamins, Water in the diet.

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Nutrients</li> <li>• Micronutrients-vitamins</li> <li>• Water in the diet</li> </ul>	<ul style="list-style-type: none"> <li>• Određivanje mikronutritijenata u hrani</li> <li>• Određivanje kvantitativnog i kvalitativnog sastava hrane.</li> </ul>

**TEACHING UNIT 7 (VII WEEK):**

Mineral substances Diet products

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Mineral substances</li> <li>• Diet products</li> </ul>	<ul style="list-style-type: none"> <li>• Mineral substances- practical aspects</li> <li>• Diet products- practical aspects</li> </ul>

**TEACHING UNIT 8 (VIIIWEEK):**

Examination of nutrition and nutritional status;

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Examination of nutrition and nutritional status;</li> <li>• Malnutrition diseases;</li> <li>• Obesity</li> </ul>	<ul style="list-style-type: none"> <li>• Examination of nutrition and nutritional status – practical aspects; Malnutrition diseases – practical aspects; Obesity – practical aspects;</li> </ul>

**TEACHING UNIT 9 (IX WEEK):**

Proper nutrition

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Proper nutrition;</li> <li>• Energy needs and energy expenditure of people</li> </ul>	<ul style="list-style-type: none"> <li>• Proper nutrition; energy needs and energy expenditure of people- practical aspects</li> </ul>

**TEACHING UNIT 10 (X WEEK):**

Diet prophylaxis and Diet therapy

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Diet prophylaxis and Diet therapy;</li> </ul>	<ul style="list-style-type: none"> <li>• Diet prophylaxis and Diet therapy- practical aspects.</li> </ul>

**TEACHING UNIT 11 (XI WEEK):**

Health food safety; Quality systems; Food contamination

lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Health food safety;</li> <li>• Quality systems;</li> <li>• Food contamination;</li> </ul>	<ul style="list-style-type: none"> <li>• Health food safety – practical aspects; Quality systems – practical aspects; Food contamination – practical aspects;</li> </ul>



**THIRD MODULE: GROWTH AND DEVELOPMENT HYGIENE, SCHOOL HYGIENE, WORK HYGIENE, SPORTS AND PHYSICAL ACTIVITY HYGIENE, MENTAL HYGIENE, SANITARY HYGIENE, HYGIENE IN EMERGENCY SITUATIONS, GENERAL HYGIENE**

**TEACHING UNIT 12 (XII WEEK):**

Growth and development hygiene; School hygiene; work-occupation hygiene	
lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Growth and development hygiene; School hygiene; work-occupation hygiene</li> </ul>	<ul style="list-style-type: none"> <li>• Growth and development hygiene – practical aspects; School hygiene – practical aspects; work-occupation hygiene</li> </ul>

**TEACHING UNIT 13 (XIII WEEK):**

Sports and physical activity hygiene, Mental hygiene ,Stress prevention, Prevention of addiction	
lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Sports and physical activity hygiene</li> <li>• Mental hygiene</li> <li>• Stress prevention</li> <li>• Prevention of addiction</li> </ul>	<ul style="list-style-type: none"> <li>• Sports and physical activity hygiene – practical aspects; Personal hygiene – practical aspects; Mental hygiene – practical aspects; Stress prevention – practical aspects; Prevention of addiction- practical aspects</li> </ul>

**TEACHING UNIT 14 (XIV WEEK):**

Hospital infection prevention; Sanitary hygiene; Personal hygiene	
lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Hospital infection prevention;</li> <li>• Sanitary hygiene;</li> <li>• Personal hygiene</li> </ul>	<ul style="list-style-type: none"> <li>• Hospital infection prevention – practical aspects; Sanitary hygiene – practical aspects; Personal hygiene- practical aspects;</li> </ul>

**TEACHING UNIT 15 (XV WEEK):**

Hygiene in emergency situations; Living and working environment – assessment of the impact on health	
lectures 4 hours	exercises 2 hours
<ul style="list-style-type: none"> <li>• Hygiene in emergency situations;</li> <li>• Living and working environment – assessment of the impact on health.</li> </ul>	<ul style="list-style-type: none"> <li>• Hygiene in emergency situations – practical aspects; Living and working environment - assessment of the impact on health – practical aspects.</li> </ul>

## WEEKLY COURSE SCHEDULE

COURSE	TUESDAY
<b>HYGIENE AND ECOLOGY</b> (4+2)	<b>LECTURES</b> <b>14:00-17:15</b> (H44)  <b>PRACTICE</b> <b>17:30-19:00</b> (H44)

### class schedule

modul	Week	Type	Name of lesson	Teachers
1	1	<b>L</b>	Introduction to hygiene, atmosphere, influence on health	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić
1	1	<b>S</b>	Introduction to hygiene, atmosphere, influence on health	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
1	2	<b>L</b>	Climate, microclimate, noise, vibrations, radiation – impact on health	Doc. dr Dalibor Stajić Doc. dr Marija Sekulić Prof. dr Nela Đonović
1	2	<b>S</b>	Climate, microclimate, noise, vibrations, radiation – impact on health	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
1	3	<b>L</b>	Drinking water – impact on health; Waste materials – impact on health	Doc. dr Dalibor Stajić Doc. dr Marija Sekulić Prof. dr Nela Đonović
1	3	<b>S</b>	Drinking water – impact on health; Waste materials – impact on health	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
1	4	<b>L</b>	Ecotoxicology; Environmental poisoning	Doc. dr Marija Sekulić Doc. dr Dalibor Stajić Prof. dr Nela Đonović
1	4	<b>S</b>	Ecotoxicology; Environmental poisoning	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević

### class schedule

modul	Week	Type	Name of lesson	Teachers
2	5	<b>L</b>	Food hygiene: introduction and nutrition, foodstuffs, macronutrients	Prof. Dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić
2	5	<b>S</b>	Food hygiene: introduction and nutrition, foodstuffs, macronutrients	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
2	6	<b>L</b>	Nutrients, Micronutrients-vitamins, Water in the diet.	Doc. dr Dalibor Stajić Doc. dr Marija Sekulić Prof. dr Nela Đonović
2	6	<b>S</b>	Nutrients, Micronutrients-vitamins, Water in the diet.	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
2	7	<b>L</b>	Mineral substances Diet products	Doc. dr Marija Sekulić Prof. Dr Nela Đonović Doc. dr Dalibor Stajić
2	7	<b>S</b>	Mineral substances Diet products	Prof. Dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
2	8	<b>L</b>	Examination of nutrition and nutritional status;	Doc.dr Dalibor Stajić Prof. Dr Nela Đonović Doc. dr Marija Sekulić
2	8	<b>S</b>	Examination of nutrition and nutritional status;	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević

### class schedule

modul	Week	Type	Name of lesson	Teachers
2	9	<b>L</b>	Proper nutrition	Prof. Dr Nela Đonović Doc.dr Dalibor Stajić Doc. dr Marija Sekulić
2	9	<b>S</b>	Proper nutrition	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
2	10	<b>L</b>	Diet prophylaxis and Diet therapy	Prof. Dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić
2	10	<b>S</b>	Diet prophylaxis and Diet therapy	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
3	11	<b>L</b>	Health food safety; Quality systems; Food contamination	Doc. dr Marija Sekulić Doc. dr Dalibor Stajić Prof. dr Nela Đonović
3	11	<b>S</b>	Health food safety; Quality systems; Food contamination	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
3	12	<b>L</b>	Growth and development hygiene; School hygiene; work-occupation hygiene	Doc. dr Marija Sekulić Doc. dr Dalibor Stajić Prof. dr Nela Đonović
3	12	<b>S</b>	Growth and development hygiene; School hygiene; work-occupation hygiene	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević

### class schedule

modul	Week	Type	Name of lesson	Teachers
3	13	<b>L</b>	Sports and physical activity hygiene, Mental hygiene ,Stress prevention, Prevention of addiction	Doc.dr Dalibor Stajić Doc. dr Marija Sekulić Prof. dr Nela Đonović
3	13	<b>S</b>	Sports and physical activity hygiene, Mental hygiene ,Stress prevention, Prevention of addiction	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
3	14	<b>L</b>	Hospital infection prevention; Sanitary hygiene; Personal hygiene	Doc. dr Marija Sekulić Doc. dr Dalibor Stajić Prof. dr Nela Đonović
3	14	<b>S</b>	Hospital infection prevention; Sanitary hygiene; Personal hygiene	Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
3	15	<b>L</b>	Hygiene in emergency situations; Living and working environment – assessment of the impact on health	Prof. Dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić
3	15	<b>S</b>	Hygiene in emergency situations; Living and working environment – assessment of the impact on health	Prof. dr Nela Đonović Doc. dr Marija Sekulić Doc. dr Dalibor Stajić dr Nikoleta Janićijević
		<b>I</b>	<b>COLLOQUIUM</b>	
		<b>I</b>	<b>EXAM (JANUARY-FEBRUARY TERM)</b>	