Sveučilište u Rijeci
University of Rijeka

Sveučilište u Rijeci • Fakultet dentalne medicine
University of Rijeka • Faculty of Dental Medicine
Krešimirova 40/42 • 51000 Rijeka • CROATIA
Phone : + 385 51 559 200; 559 202, 559 203

Course: Public Health
Course Coordinator: Professor Stjepan Špalj
Course Collaborators: Vladimir Mozetič, assistant professor, Matea Badnjević, DMD, Martina Brumini, PhD, Martina Žigante, PhD
Department: Department of Orthodontics
Study program: University Integrated Undergraduate and Graduate Study of Dental Medicine (in English)
Study year: 4th
Academic year: 2024./25.

SYLLABUS

Course description (a brief description of the course, general instructions, where and in what form the lessons are organized, necessary equipment, instructions for attendance and preparation for classes, student obligations, etc.):

This compulsory course consists of 15 hours of lectures and 15 hours of practicals, a total of 30 hours (2 ECTS). The course is conducted in hybrid form – on site and on line by using the Merlin and Teams platform.
The aim of the course is to familiarize students with the concepts of oral epidemiology, public health, oral health policy and economics.
The content of the course is as follows:
Scope of public health and oral epidemiology
Morbidity and epidemiological indicators of oral diseases, conditions and health
Biopsychosocial model of disease - health, disease and quality of life
Public health interventions
Oral care of specific population groups
Planning dental public health interventions and promotion of oral health
Oral health policy, planning and financing of public dental care
Teaching:
Teaching is conducted in the form of lectures and practicals in the rotation during the 7th semester. At the end is the final exam. By completing all teaching activities, presenting the public health topic/project and taking the final exam, 2 ECTS points are gained.

Assigned reading:

1. Pine C, Harris R. Community oral health. Berlin: Quintessenz; 2007.
2. Burt BA, Eklund SA. Dentistry, dental practice, and the community. 7th ed. St. Louis: Saunders; 2020.

Optional/additional reading:

1. Peres MA, Antunes JLF, Watt RG. Oral epidemiology. A textbook on oral health conditions, research topics and methods. Cham: Springer; 2021.

2. Chattopadhyay A. Oral health epidemiology: principles and practice. Burlington: Jones and Bartlett Publishers; 2011.

COURSE TEACHING PLAN:

The list of lectures (with topics and descriptions):

L1. Scope of public health
Learning outcomes:
• Discuss the scope of public health and the principles of oral epidemiology
• Analyze epidemiological terms

L2. Oral health, disease and quality of life: definition of terms.
Learning outcomes:
• Discuss the terms health, disease and quality of life
• Diferentiate the biomedical and biopsychosocial model of the disease

L3. Epidemiological methods in research
Learning outcomes:
• Analyze the differences between observational, analytical and experimental methods

L4. Evidence-based health care
Learning outcomes:
• Discuss the concept of health care based on scientific evidence and facts
• Discuss the power pyramid of scientific research

L5. Indicators of oral diseases, conditions, health and treatment need
Learning outcomes:
• Analyze indices for the assessment of morbidity
• Calculate the DMFT index
• Apply the method of calculating the Full Mouth Plaque Score
• Calculate the Full Mouth Bleeding Score
• Use the index to analyze the condition and assess the need for therapy.

L6. Screening
Learning outcomes:
• Discuss ways of early disease detection
• Explain ways of evaluating the accuracy of screening
• Valorize the advantages and disadvantages of screening.

L7. Public health anti-epidemic measures
Learning outcomes:
• Discuss anti-epidemic measures using the example of the disease COVID-19
• Implement anti-epidemic measures (according to the source of infection, ways of spreading, according to people at risk)
• Valorize the benefits and risks of vaccination.

L8. Oral health risk behaviors
Learning outcomes:
• Analyze the impact of lifestyle on oral diseases, conditions and health
• Explain the connection between nutrition and oral diseases
• Discuss the connection between alcohol and tobacco consumption and oral diseases
• Analyze the connection between parafunctions and oral diseases

L9. Public health interventions in dental medicine
Learning outcomes:
• Discuss the way of planning dental public health interventions

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• Analyze the possibilities and limitations of dental public health interventions by target population groups

L10. Health literacy

Learning outcomes:

• Discuss the relationship between the health literacy and public health

L11. National programs for the promotion of oral health

Learning outcomes:

• Describe the pyramid of measures to promote oral health
• Analyze public health measures in European countries and Croatia

L12. Oral health policy and legislation

Learning outcomes:

• Analyze the relationship between public and private interest
• Classify the organization of the health system
• Analyze legal health regulations

L13. Health economics and financing of public dental care

Learning outcomes:

• Discuss ways of financing health spending
• Differentiate payment methods in healthcare
• Analyze the "basket of services" in the dental public health service

L14. Social context – inequalities in oral health

Learning outcomes:

•Discuss social inequalities and inequalities in oral health

L15. Classification systems in healthcare

Learning outcomes:

•Discuss the principles of the International Classification of Diseases and Conditions

The list of seminars with descriptions:

The list of practicals with descriptions:

During the practicals, students measure and calculate indicators of oral diseases, health and quality of life, plan, present and discuss a public health topic/project.

Students' obligations:

Students are obliged to regularly attend and actively participate in all forms of classes. A maximum of 30% of classes can be missed with justification. The presentation of the public health topic / project and the final exam are mandatory.

Assessment (exams, description of written / oral / practical exam, the scoring criteria):

ECTS credit grading system:
Student assessment is carried out according to the current Regulations on Studies of the University of Rijeka.
Student work will be evaluated and graded during classes and at the final exam. Out of a total of 100 grade points, a student can achieve 50 points during classes and another 50 points on the exam.
Student assessment is performed using ECTS (A-F) and number system (5-1). Grading in the ECTS system is performed by absolute distribution.

Students who gain from 0 to 24.9% of grades that could be obtained during classes through forms of continuous monitoring and evaluation of students are graded F (unsuccessful), can not gain ECTS credits and must re-enroll the course.

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The student gains grades by actively participating in classes and performing the set tasks.

During the classes, the public health topic/project is evaluated (maximum up to 50 points):
The grade of the presented topic/project carries 50 grade points (passing grades in the range of 25-50), and is converted into grade points as follows:

grade	scalar points
2	25
2-3	29
3	33
3-4	37
4	42
4-5	46
5	50

Final exam (total 50 points)

Who can take the final exam:
Students who achieved 25% and more grade points during classes through forms of continuous monitoring and evaluation of students.

Who cannot take the final exam:
Students who achieved from 0 to 24,9% of grades during classes are graded F (unsuccessful), can not gain ECTS credits and must re-enroll the course.

The final exam is written (it can be in a form of multiple answers questions or answers in essay form), carries 50 grade points (passing grades ranging from 25-50). In the case of multiple answers questions ratio of correct answers is multiplied by a weight of 0.5. The limiter is 50%. When hawing test in essay form grade is converted in scalar poins in this manner:

grade	scalar points
2	25
2-3	29
3	33
3-4	37
4	42
4-5	46
5	50

To pass the final exam and for the final grade (including suming previously achieved grade points during classes), the student must have a positive grade in the final exam and achieve a minimum of 25 grade points (50%).

Assessment in the ECTS system is performed by absolute distribution, ie on the basis of the final achievement:
A– 90-100% points
B – 75-89,9 %
C – 60-74,9 %
D -- 50-59,9%
F – 0-49,9%

Grades in the ECTS system are transformed into a numerical system as follows:
A = excellent (5)
B = very good (4)
C = good (3)

D = sufficient (2)
F = unsufficient (1)

Other important information regarding to the course:

Teaching contents and all information related to the course can be found on the e-course on the Merlin platform.
Any use of someone else's text or other form of author's work, as well as the use of ChatGPT or any other tool whose functionality is based on artificial intelligence technology, without clear and unambiguous indication of the source, is considered a violation of someone else's copyright and the principle of academic integrity, and represents a serious violation of student rights. an obligation that entails disciplinary responsibility and disciplinary measures in accordance with the Rulebook on Student Disciplinary Responsibility.
Consultation time: Professor Špalj: Friday 9-10 a.m
Matea Badnjević: Tuesday 1-2 p.m.

COURSE SCHEDULE (for the academic year 2024/2025)

Date	Lectures (time and place)	Seminars (time and place)	Practicals (time and place)	Instructor
16.10.2024.	L1 (14.45-15.30)			professor Stjepan Špalj
	On-line Krešimirova 42			
16.10.2024.			P1 groups AB (15.30-16.15)	Martina Brumini, PhD
			P2 groups AB (16.15-17.00)	Vjera Perković, PhD
			P3 groups AB (17.00-17.45)	
			Krešimirova 42	
23.10.2024.	L2 (14.45-15.30)			professor Stjepan Špalj
	L3 (15.30-16.15)			
	L4 (16.15-17.00)			
	L5 (17.00-17.45) On-line			
30.10.2024.	L6 (14.45-15.30)			Vladimir Mozetič, assistant professor
	L7 (15.30-16.15) Krešimirova 42			
			P4 groups AB (16.15-17.00)	Matea Badnjevic, DMD
			P5 groups AB (17.00-17.45) Krešimirova 42	Vjera Perković, PhD
6.11.2024.	L13 (14.30-15.15)			

	L14 (15.15-16.00)			
	L15 (16.00-16.45)			
	On-line			
13.11.2024.			P5 groups AB (14.30-15.15)	Matea Badnjevic, DMD
			P6 groups AB (15.15-16.00)	Vjera Perković, PhD
			P7 groups AB (16.15-17.00)	
			P8 groups AB (17.00-17.45)	
			Krešimirova 42	
20.11.2024.			P9 groups AB (14.30-15.15)	Matea Badnjević, DMD
			P10 groups AB (15.15-16.00)	Vjera Perković, PhD
			P11 groups AB (16.15-17.00) Krešimirova 42	
27.11.2024.			P12 groups AB (14.30-15.15)	Professor Stjepan Špalj
			P13 groups AB (15.15-16.00) P14 groups AB (16.15-17.00) P15 groups AB (17.00-17.45) Krešimirova 42	Matea Badnjević, DMD

List of lectures, seminars and practicals:

	LECTURES (Topics)	Teaching hours	Location/Lecture room
P1	Scope of public health	1	Krešimirova 42
P2	Oral health, disease and quality of life: definition of terms	1	Krešimirova 42
P3	Epidemiological methods in research	1	Krešimirova 42
P4	Evidence-based health care	1	Krešimirova 42
P5	Indicators of oral diseases, conditions, health and treatment need	1	Krešimirova 42
P6	Screening	1	Krešimirova 42
P7	Public health anti-epidemic measures	1	Krešimirova 42
P8	Oral health risk behaviors	1	Krešimirova 42
P9	Public health interventions in dental medicine	1	Krešimirova 42
P10	Health literacy	1	Krešimirova 42
P11	National programs for the promotion of oral health	1	Krešimirova 42

P12	Oral health policy and legislation	1	Krešimirova 42
P13	Health economics and financing of public dental care	1	Krešimirova 42
P14	Social context – inequalities in oral health	1	Krešimirova 42
P15	Classification systems in healthcare	1	Krešimirova 42
	TOTAL TEACHING HOURS		

	SEMINARS (Topics)	Teaching hours	Location/Lecture room
	TOTAL TEACHING HOURS		

	PRACTICALS (Topics)	Teaching hours	Location/Lecture room
V1-4	Coding of diseases and conditions according to the 10th revision of the International Classification of Diseases and Conditions Calculation of caries prevalence and severity (DMFT and SiC index) Calculation of the degree of oral hygiene (Full Mouth Plaque Score) Calculation of the extent of gingivitis (Full Mouth Bleeding Score)	4	Krešimirova 42
V5-8	Calculation of the severity of periodontal disease (Modified Community Periodontal Index) Calculation of the prevalence and severity of edentulism Calculation of the severity of malocclusion and the need for orthodontic treatment (IOTN DHC)	4	Krešimirova 42
V9-12	Students' presentations	4	Krešimirova 42
V13-15	Students' presentations	3	Krešimirova 42
	TOTAL TEACHING HOURS	15	

	FINAL EXAM DATES
1.	11.12.2024.
2.	15.1.2025.
3.	12.2.2025.
4.	12.3.2025.

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	Lectures	Seminars	Practicals	Total
Total number	15		15	30
On-line	13			13
Percentage	87%			43%