



# [Medicinski fakultet u Rijeci]

# **Curriculum 2023/2024**

[Za kolegij]

# **Public Health**

Study program: Medical Studies in English (R)

[Sveučilišni integrirani prijediplomski i diplomski studij]

Department: [Katedra za socijalnu medicinu i epidemiologiju]

Course coordinator: izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing.

Year of study: 6 ECTS: 4

Incentive ECTS: 0 (0.00%)

Foreign language: No

### Course information:

The Public Health is a compulsory course in the VI. year of the Integrated Undergraduate and Graduate University Study of Medicine, which takes place at 11th semester, and consists of 30 hours of lectures, 15 hours of seminars and 15 hours of exercises, i.e. a total of 60 hours (4 ECTS). The course takes place in the lecture halls of the Faculty of Medicine of the University of Rijeka and online.

The method and form of teaching may be changed depending on the epidemiological situation related to the epidemic COVID -19, about which the students will be informed in time.

**The aim** of the course is to familiarise students with the development, role and functioning of the public health system in our country and in the world, as well as with the way the health system functions and is organised.

The content of the course is as follows: Students will learn what public health is, what are the main public health challenges of the 21st century, how health care is organised for all population groups and in different emergency situations. In addition, students will acquire knowledge of the peculiarities of the organisation of health care in the community, the peculiarities of the organisation of health and social care, methods of financing and the basics of management in health and social care, health economics and the implementation of public health interventions.

### **LEARNING OUTCOMES FOR THE COURSE:**

- I. COGNITIVE DOMAIN KNOWLEDGE At the end of the course, students will be able to:
- explain the importance of public health in the 21st century and its influence on the organisation and delivery of health care,
- distinguish levels of health care provision, identify financing methods and their impact on he availability and use of health care.
- explain the importance and organisation of the social system,
- interpret the various challenges of today and the ways of organising and providing health care,
- explain the importance and the way of implementation of public health interventions.

**II.PSYCHOMOTOR DOMAIN - SKILLS** At the end of the course, students will be able to identify and relate the methodology used in public health research to practise and develop methods of evaluation.

# Delivery of teaching:

Classes are delivered in the form of lectures, seminars and exercises. Active participation of students in the curriculum is achieved by conducting seminars, which students prepare in advance, and during the exercises they conduct research in the community. During lectures, students are actively involved in thinking about thematic issues. The seminars prepare students for independent problem solving and integrative thinking. Students' active participation in the curriculum is achieved through independent reading of available and peer-reviewed literature, drawing correct conclusions, conducting research in the community and writing seminar papers. During the exercises, students are divided into groups to create a programme/project for a specific public health priority. This is done based on a mentor-led analysis of databases, selection of an individual priority and creation of a specific programme/project. The student is required to prepare the material discussed.

The lecturer will assess the student's participation in the seminar work (demonstrated knowledge, understanding, ability to pose problems, concluding, etc.).

# List of assigned reading:

- 1. Oxford Textbook of Global Public Health (6 ed.). Roger Detels, Martin Gulliford, Quarraisha Abdool Karim, and Chorh Chuan Tan (eds.), Oxford Medicine Online, 2015.
- 2. Oxford Handbook of Clinical and Healthcare Research. Sumantra Ray, Sue Fitzpatrick, Rajna Golubic, Susan Fisher, and Sarah Gibbings (eds.), Oxford University Press, 2016.

# List of optional reading:

1. Selected databases and articles from relevant literature freely available on the Internet

# **Curriculum:**

# [Predavanja] list (with titles and explanation):

# Lecture 1: Definition and tasks of public health, Determinants of health.

Learning outcomes: Recognise basic concepts of public health, recognise the influence of determinants of health on population health.

# Lecture 2: Historical development of public health

Learning outcomes: Describe the historical development of public health

# Lecture 3: The role and functions of public health.

Learning outcomes: Recognise the main roles and responsibilities of public health.

# Lecture 4: Legislation - Health Care Act of the Republic of Croatia.

Learning outcomes: Explain the method and levels of health care delivery using examples.

### Lecture 5: Basics of the health care contract with Croatian Health Insurance Fund.

Learning outcomes: Name the organisation of health insurance, discover the rights and obligations of users, distinguish between compulsory and voluntary health insurance, recognise the basics of the health insurance contract with Croatian Health Insurance Fund, who has the possibility to conclude a contract and what rights and obligations the contracting parties have.

# Lecture 6: Social Welfare Law of the Republic of Croatia

Learning outcomes: State the way social welfare is organised in the Republic of Croatia. Recognise the legal framework in which social assistance is organised, the rights of beneficiaries and the main institutions in which social assistance is implemented.

# Lecture 7: Organisation of the health care system.

Learning outcomes: Describe the way health care is organised in the Republic of Croatia

# Lecture 8: Management in public health care

Learning outcomes: Explain the way of management in the public health system, discuss the advantages and disadvantages of the system.

# Lecture 9: Health care planning, selection of priorities.

Learning outcomes: Outline the planning of the health care system in the Republic of Croatia and select the most important priorities

# Lecture 10: Health and social strategy and policy.

Learning outcomes: To consider health and social strategy and policy planning. Introduce definitions, strategies and the way health and social strategy is interrelated.

# Lecture 11: Public health projects and programmes.

Learning outcomes: Explain the idea of implementing public health projects and programmes

# Lecture 12: Leading public health challenges in the 21st century.

Learning outcomes: Identify the key public health challenges in the modern world.

# Lecture 13: Health for All in the 21st Century

Learning outcomes: Consider key strategic documents. Introduce key objectives, value principles and key strategies. Presentation of key goals, value principles and key strategies. Identify current trends in health improvement at local, regional and international levels.

# Lecture 14-15: Health care quality assessment, standards and norms.

Learning outcomes: Introduce methods for evaluating the quality of health care and ensure standards and norms for quality assurance.

# Lecture 16: Organisation of palliative care, hospice

Learning outcomes: To present the organisation of the system of rehabilitation and palliative care and hospice in the Republic of Croatia. Identification of the field of action of palliative care.

# Lecture 17: Public health interventions, primary, secondary, and tertiary prevention.

Learning outcomes: Define terms and levels of public health interventions with examples.

# Lecture 18-19: Assessment of the health status of the population, indicators of health and disease in the community, health and statistical indicators for PGŽ and the Republic of Croatia

Learning outcomes: Identify the most important indicators of health and disease in the population in our country and in the world, focusing on health status assessment. To get an insight at the most important health statistical indicators for the Primorje–Gorski Kotar County and the Republic of Croatia.

# Lecture 20-21: Mental health of the population as a public health challenge

Learning outcomes: Classify mental health assessment in relation to age and population groups.

# Lecture 22: Red Cross, International Organisations.

Learning Outcomes: Identify the main international organisations and their role in society

### **Lecture 23: Health Care Financing**

Learning outcomes: Critically analyse the way health care is financed in our country and in the world

### Lecture 24: Economics in health care, rationalisation in health care

Learning outcomes: Describe the economic organisation of health care and distinguish between different systems. Basic economic concepts in health care. Describe the possibilities of rationalisation in health care

# Lecture 25: Development and entrepreneurship in the health system, EU funds and priorities in the health sector

Learning outcomes: Consideration of development and entrepreneurship in the health system. Introduce the basic definitions, tasks and roles of entrepreneurship in health. Distinguish EU funds for population health and relate them to health priorities

# Lecture 26-27: Health care in emergency situations

Learning outcomes: Define and classify exceptional circumstances. Recognise the impact of violence, conflict, and other exceptional circumstances on population health.

# Lecture 28-30: Final lecture with presentation of seminar papers, discussion on public health programmes/projects covered in seminar papers

Learning outcomes: Critical analysis of the public health programmes/projects covered in the seminar papers.

# [Vježbe] list (with titles and explanation):

# Exercise 1. Development of a public health programme/project for a specific public health priority I.

Learning outcomes: Create a database with the data collected, group and describe the results achieved and link them to the public health programme.

# Exercise 2. Development of a public health programme/project for a specific public health priority II.

Learning outcomes: Create a database with the data collected, group and describe the results achieved and link them to the public health programme.

# Exercise 3. Development of a public health programme/project for a specific public health priority III

Learning outcomes: Create a database with the data collected, group and describe the results achieved and link them to the public health programme.

# Exercise 4. Development of a public health programme/project for a specific public health priority IV.

Learning outcomes: Create a database with the data collected, group and describe the results achieved and link them to the public health programme.

# Exercise 5. Development of a public health programme/project for a specific public health priority V.

Learning outcomes: Create a database with the data collected, group and describe the results achieved and link them to the public health programme.

# [Seminari] list (with titles and explanation):

# Seminar 1. Methodology of work in public health I.

Learning outcomes: Recognise basic concepts from biostatistics and epidemiology for the purpose of public health research.

# Seminar 2. Methodology of work in public health II.

Learning outcomes: Recognise quantitative research methodology in the field of public health.

# Seminar 3. Methodology of work in public health III.

Learning outcomes: Search evidence-based databases in public health.

# Seminar 4. Methodology of work in public health IV

Learning outcomes: Recognise qualitative research methodology in public health.

# Seminar 5. Methodology of work in public health V.

Learning outcomes: Recognise the ethical aspects of public health research.

# Student obligations:

The student is required to prepare the material discussed in the lectures and the seminars and to participate actively in the exercises. The teacher evaluates the student's participation in the work in the seminar (demonstrated knowledge, understanding, ability to pose problems, argumentation, etc.) and during the exercises. The "earned" points are added to the points obtained in the final examination. The final exam is written in the form of an essay and oral.

# Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

Assessment (ECTS credits):

The assessment of students is carried out in accordance to the current Regulation of studies of the University of Rijeka, and according to the Regulation of Student Assessment at the Faculty of Medicine in Rijeka (adopted by the Faculty Council of the Faculty of Medicine in Rijeka). The students are evaluated during the course and on the final exam (a total of 100 credits).

Of a total of 100 credits, a student can acquire 50 credits during the course and 50 credits on the final exam.

# I. Assessment during the course (max 50 credits):

- a) Preparation of a written seminar paper / programme / project in the field of public health (30 credits) b) Oral presentation of the seminar (20 credits) The requirement for participation in the final exam is a minimum of 50% (25 credits) achieved during the class.
- a) Written seminar paper (30 credits): In the written seminar paper, the programme/project assignment is presented and written according to the instructions given. There are a certain number of points for each chapter. The presentation of the results includes the results obtained while conducting research on a specific topic.
  - I. Introduction and aim of the work 5 credits
  - II. Materials and Methods 5 credits
  - III. Presentation of results 15 credits
  - IV. Conclusion and Literature 5 credits
- b) **Oral presentation of the seminar paper (20 credits)**: A positively assessed presentation from a specific area is graded:
  - I. excellent 20 credits
  - II. very good 15 credits
  - III. good 12 credits
  - IV. sufficient 10 credits

# II. Final examination (up to 50 credits)

The final examination tests important, specific competences. The final exam consists of a written part (in the form of an essay in which the student elaborates on a given topic) and followed by an oral exam.

# Who can take the final examination:

• Students who have obtained at least 50% of the credits(25 credits) during the classes are entitled to take the final written and oral examination; both parts of the final examination being cumulatively assessed.

# Who cannot take the final examination:

- Students who have scored 0 to 49.9 points in class or who have 30% or more absences from class. Such a student is unsuccessful (1) F and cannot take the final examination, i.e. he/she must take the course again in the following academic year.
- III. The final grade is the sum of the ECTS grades obtained during the course and the final examination:
  - I. A (90-100%) excellent (5)
  - II. B (75-89,9%) Very good (4)
  - III. C (60-74,5%) good (3)
  - IV. D (50-59,9%) sufficient (2)
  - V. F (0-49,9%) or less than half of the credits that can be earned during the course or less than half of the credits that can be earned in the final examination insufficient (1)

# Other notes (related to the course) important for students:

Teaching contents and all information related to the course are available on the Merlin system.

# **COURSE HOURS 2023/2024**

Public Health

[Predavanja] (Place and time or group)	[Vježbe] (Place and time or group)	[Seminari] (Place and time or group)
02.10.2023		
Lecture 1: Definition and tasks of public health, Determinants of health.:  • [ONLINE] (08:00 - 09:00) [169]  • PH		
Lecture 2: Historical development of public health:  • [ONLINE] (09:00 - 10:00) [335]  • PH		
Lecture 3: The role and functions of public health.:  • [ONLINE] (10:00 - 11:00) [333]  • PH		
Lecture 13: Health for All in the 21st Century: • [ONLINE] (12:00 - 15:00) [336] • PH		
Lecture 20-21: Mental health of the population as a public health challenge:  • [ONLINE] (12:00 - 15:00) [336]  • PH		
Lecture 6: Social Welfare Law of the Republic of Croatia: • [ONLINE] (14:00 - 15:00) [335] • PH		
izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. <sup>[335]</sup> · doc. dr. sc. Ro prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. <sup>[333]</sup>	oviš Darko, prof. <sup>[336]</sup> · prof. dr. sc. Rukavina	Tomislav, dr. med. <sup>[169]</sup> .
03.10.2023		
	Exercise 1. Development of a public health programme/project for a specific public health priority I.:  • [P15 - VIJEĆNICA] (10:00 - 13:00) [169] [334] [1495]  • PH	Seminar 4.  Methodology of work in public health IV:  • [P08] (13:00 - 16:00 [333]
Juraga Denis, mag. sanit. ing. <sup>[334]</sup> · Marinović Glavić Mihaela <sup>[1495]</sup> Vanja, dipl. sanit. ing. <sup>[333]</sup>		
Vanja, dipi. sanit. ing. 1999 <b>04.10.2023</b>		
Lecture 4: Legislation – Health Care Act of the Republic of		Seminar 2.
Croatia.: • [P15 - VIJEĆNICA] (08:00 - 09:00) [333] • PH		Methodology of work in public health II.: • [P07] (12:00 - 14:30
Lecture 8: Management in public health care: • [P15 - VIJEĆNICA] (09:00 - 11:00) [335] • PH		∘ PH Seminar 3.
Lecture 9: Health care planning, selection of priorities.: • [P15 - VIJEĆNICA] (09:00 - 11:00) [335] • PH		Methodology of work in public health III.: • [P07] (14:30 - 17:00 [336]
		∘ PH
izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. <sup>[335]</sup> · doc. dr. sc. Ro	oviš Darko, prof. [336] · prof. dr. sc. Vasiljev \	/anja, dipl. sanit. ing. <sup>[333]</sup>

# Lecture 10: Health and social strategy and policy.: • [P02] (08:00 - 10:00) [335] • PH Lecture 11: Public health projects and programmes.: • [P02] (08:00 - 10:00) [335] • PH Lecture 5: Basics of the health care contract with Croatian Health Insurance Fund.: • [P02] (10:00 - 11:00) [333] • PH

izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. [335] · doc. dr. sc. Janev Holcer Nataša, dipl. ing. biolo. [1183] · prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. [333]

# 06.10.2023

Lecture 7: Organisation of the health care system.:

• [P08] (08:00 - 09:30) <sup>[333]</sup>

o Ph

Lecture 16: Organisation of palliative care, hospice:

• [P08] (08:00 - 09:30) <sup>[333]</sup>

PF

Lecture 14-15: Health care quality assessment, standards and norms.:

• [ONLINE] (11:00 - 13:00) <sup>[169]</sup>

o PH

Lecture 18-19: Assessment of the health status of the population, indicators of health and disease in the community, health and statistical indicators for PG $\check{\mathbf{Z}}$  and the Republic of Croatia:

• [ONLINE] (13:30 - 15:15) [1183]

∘ PH

Exercise 2. Development of a public health programme/project for a specific public health priority II.:

• [ONLINE] (14:00 - 17:00) [169] [334] [1495]

o PH

doc. dr. sc. Janev Holcer Nataša, dipl. ing. biolo.  $^{[1183]} \cdot$  Juraga Denis, mag. sanit. ing.  $^{[334]} \cdot$  Marinović Glavić Mihaela  $^{[1495]} \cdot$  prof. dr. sc. Rukavina Tomislav, dr. med.  $^{[169]} \cdot$  prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing.  $^{[333]} \cdot$ 

# 09.10.2023

Exercise 3. Development of a public health programme/project for a specific public health priority III:

• [P01] (11:00 - 12:00) <sup>[169]</sup> [334] [1495] • PH

• [P15 - VIJEĆNICA] (13:00 - 19:00) [169] [334] [1495]

o PH

Exercise 4. Development of a public health programme/project for a specific public health priority IV.:

• [P15 - VIJEĆNICA] (13:00 - 19:00) [169] [334] [1495]

 $\circ \ \mathsf{PH}$ 

Seminar 5. Methodology of work in public health V.:

• [P01] (08:15 - 11:00) [169] [334]

o PH

Juraga Denis, mag. sanit. ing. [334] · Marinović Glavić Mihaela [1495] · prof. dr. sc. Rukavina Tomislav, dr. med. [169]

# 10.10.2023

Lecture 12: Leading public health challenges in the 21st Exercise 5. Development of a public century.: health programme/project for a • [P07] (09:00 - 10:30) [333] specific public health priority V.: • [P08] (15:00 - 18:00) [169] [334] [1495] o PH o PH Lecture 17: Public health interventions, primary, secondary, and tertiary prevention.: • [P07] (09:00 - 10:30) <sup>[333]</sup> Lecture 6: Social Welfare Law of the Republic of Croatia: • [P07] (10:30 - 11:15) <sup>[335]</sup>  $\circ$  PH Lecture 24: Economics in health care, rationalisation in health care: • [P08] (12:00 - 13:00) <sup>[335]</sup> o PH Lecture 22: Red Cross, International Organisations.: • [P08] (13:00 - 15:00) <sup>[169]</sup> o PH Lecture 23: Health Care Financing: • [P08] (13:00 - 15:00) <sup>[169]</sup> o PH izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. [335] · Juraga Denis, mag. sanit. ing. [334] · Marinović Glavić Mihaela [1495] · prof. dr. sc. Rukavina Tomislav, dr. med. [169] prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. [333] 11.10.2023 Lecture 25: Development and entrepreneurship in the health system, EU funds and priorities in the health sector: • [ONLINE] (08:15 - 09:00) [169] ∘ PH

doc. dr. sc. Janev Holcer Nataša, dipl. ing. biolo. [1183] · prof. dr. sc. Rukavina Tomislav, dr. med. [169]

# 07.11.2023

o PH

Lecture 28-30: Final lecture with presentation of seminar papers, discussion on public health programmes/projects covered in seminar papers:

Lecture 26-27: Health care in emergency situations:

• [ONLINE] (09:15 - 11:00) [1183]

• [ONLINE] (15:00 - 18:00) [169] [333] [334] [335] [336] [1183] [1495]

o PH

izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. <sup>[335]</sup> · doc. dr. sc. Janev Holcer Nataša, dipl. ing. biolo. <sup>[1183]</sup> · Juraga Denis, mag. sanit. ing. <sup>[334]</sup> · Marinović Glavić Mihaela <sup>[1495]</sup> · doc. dr. sc. Roviš Darko, prof. <sup>[336]</sup> · prof. dr. sc. Rukavina Tomislav, dr. med. <sup>[169]</sup> · prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. <sup>[333]</sup>

# List of lectures, seminars and practicals:

[PREDAVANJA] (TOPIC)	Number of hours	Location
Lecture 1: Definition and tasks of public health, Determinants of health.	1	[ONLINE]
Lecture 2: Historical development of public health	1	[ONLINE]
Lecture 3: The role and functions of public health.	1	[ONLINE]
Lecture 4: Legislation - Health Care Act of the Republic of Croatia.	1	[P15 - VIJEĆNICA]

		1
Lecture 5: Basics of the health care contract with Croatian Health Insurance Fund.	1	[P02]
Lecture 6: Social Welfare Law of the Republic of Croatia	1	[ONLINE] [P07]
Lecture 7: Organisation of the health care system.	1	[P08]
Lecture 8: Management in public health care	1	[P15 - VIJEĆNICA]
Lecture 9: Health care planning, selection of priorities.	1	[P15 - VIJEĆNICA]
Lecture 10: Health and social strategy and policy.	1	[P02]
Lecture 11: Public health projects and programmes.	1	[P02]
Lecture 12: Leading public health challenges in the 21st century.	1	[P07]
Lecture 13: Health for All in the 21st Century	1	[ONLINE]
Lecture 14-15: Health care quality assessment, standards and norms.	2	[ONLINE]
Lecture 16: Organisation of palliative care, hospice	1	[P08]
Lecture 17: Public health interventions, primary, secondary, and tertiary prevention.	1	[P07]
Lecture 18-19: Assessment of the health status of the population, indicators of health and disease in the community, health and statistical indicators for PGŽ and the Republic of Croatia	2	[ONLINE]
Lecture 20-21: Mental health of the population as a public health challenge	1	[ONLINE]
Lecture 22: Red Cross, International Organisations.	1	[P08]
Lecture 23: Health Care Financing	1	[P08]
Lecture 24: Economics in health care, rationalisation in health care	1	[P08]
Lecture 25: Development and entrepreneurship in the health system, EU funds and priorities in the health sector	1	[ONLINE]
Lecture 26-27: Health care in emergency situations	2	[ONLINE]
Lecture 28-30: Final lecture with presentation of seminar papers, discussion on public health programmes/projects covered in seminar papers	3	[ONLINE]

[VJEŽBE] (TOPIC)	Number of hours	Location
Exercise 1. Development of a public health programme/project for a specific public health priority I.	3	[P15 - VIJEĆNICA]
Exercise 2. Development of a public health programme/project for a specific public health priority II.	3	[ONLINE]
Exercise 3. Development of a public health programme/project for a specific public health priority III	3	[P01] [P15 - VIJEĆNICA]
Exercise 4. Development of a public health programme/project for a specific public health priority IV.	3	[P15 - VIJEĆNICA]
Exercise 5. Development of a public health programme/project for a specific public health priority V.	3	[P08]

[SEMINARI] (TOPIC)	Number of hours	Location
Seminar 1. Methodology of work in public health I.	3	[ONLINE]
Seminar 2. Methodology of work in public health II.	3	[P07]

Seminar 3. Methodology of work in public health III.	3	[P07]
Seminar 4. Methodology of work in public health IV	3	[P08]
Seminar 5. Methodology of work in public health V.	3	[P01]

# **EXAM DATES (final exam):**

1.	06.12.2023.
2.	23.02.2024.
3.	03.05.2024.
4.	24.06.2024.
5.	08.07.2024.
6.	19.09.2024.
7.	14.11.2023.
8.	05.09.2024.