



# Faculty of Medicine in Rijeka

# **Curriculum 2024/2025**

For course

# **Public Health**

Study program: Medical Studies in English (R)

Department: University integrated undergraduate and graduate study

Department of Social Medicine and Epidemiology
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:**

# Lectures list (with titles and explanation):

# Lecture 1: Definition and tasks of public 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: Organisation of the health care system; Legislation - Health Care Act of the Republic of Croatia.

Explain the method and levels of health care delivery using examples. Describe the way health care is organised in the Republic of Croatia

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

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: Health Care Financing, Economics in health care

Critically analyse the way health care is financed in our country and in the world; Describe the economic organisation of health care and distinguish between different systems. Basic economic concepts in health care

# Lecture 7: Public health research

Explain the various research methodologies used in public health, Discuss the process of translating research findings into public health practice and policy.

# Lecture 8: Health and social strategy and policy

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

# Lecture 9: Health policy and Management

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

# Lecture 10: Health care quality assessment, standards and norms.

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

# Lecture 11: Determinants of health and health indicators

Identify the most important indicators of health and disease in the population in our country and in the world, focusing on health status assessment

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

Identify the key public health challenges in the modern world.

# Lecture 13: Public health interventions, primary, secondary, and tertiary prevention.

# Define terms and levels of public health interventions with examples

# Lecture 14: Social Welfare Law of the Republic of Croatia

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 15: Organisation of palliative care, hospice

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 16: Health care planning, selection of priorities

Outline the planning of the health care system in the Republic of Croatia and select the most important priorities.

# Lecture 17: Public health projects and programmes

Explain the idea of implementing public health projects and programmes

# Lecture 18. Successful public health projects- SEFAC, HORUS

Evaluate successful public health projects, identifying key factors that contributed to their success.

### Lecture 19: Example of research (EH-UH 2

Evaluate successful public health projects, identifying key factors that contributed to their success.

# Lecture 20: Public health campaigns - What's your number?; Hunt on a silent killer

Identify and discuss best practices and strategies employed in these projects to address public health challenges

# Lecture 21: Lifestyle medicine

Explain the fundamental principles of lifestyle medicine and its role in preventing and managing chronic diseases.

### Lecture 22: Health promotion and Behavioural Science

### Identify key factors in the behaviour change theories

# Lecture 23: Health for All in the 21st Century

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 24: Red Cross, International Organisations

# Identify the main international organisations and their role in society; Broaden the scope to include other key organizations like WHO, UNICEF, and Médecins Sans Frontières, and their roles in global health

# Lecture 25: Health care in emergency situations

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

# Lecture 26: Mental health and well being

# Understanding the public health approach to mental health and well being

# Lecture 27: Health communication and Health literacy

Developing effective communication strategies for public health messaging.

# Using media and technology to promote health literacy

# Lecture 28: New technologies in Public Health

define new techologies in the field of public health

# Lecture 29-30: 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.

### Practicals 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.

# Seminars 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 ${\bf V.}$

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 2024/2025**

Public Health

Lectures (Place and time or group)	Practicals (Place and time or group)	Seminars (Place and time or group)
30.09.2024		
Lecture 1: Definition and tasks of public health:  • ONLINE (08:00 - 10:00) [335]  • PH		
Lecture 2: Historical development of public health:  • ONLINE (08:00 - 10:00) [335]  • PH		
Lecture 3: The role and functions of public health.:  • ONLINE (10:00 - 11:00) [333]  • PH		
Lecture 5: Basics of the health care contract with Croatian Health Insurance Fund.:  • ONLINE (12:00 - 14:00) [169]  • PH		
Lecture 6: Health Care Financing, Economics in health care:  • ONLINE (12:00 - 14:00) [169]  • PH		
Lecture 4: Organisation of the health care system; Legislation - Health Care Act of the Republic of Croatia.:  • ONLINE (14:00 - 15:00) [333]  • PH		
izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. $^{[335]}\cdot$ prof. dr ing. $^{[333]}$	s. sc. Rukavina Tomislav, dr. med. <sup>[169]</sup> · prof. dr. s	l c. Vasiljev Vanja, dipl. sanit
01.10.2024		
Lecture 7: Public health research:  • P15 - TOWN HALL (13:00 - 14:00) [333]  • PH  Lecture 8: Health and social strategy and policy:  • P15 - TOWN HALL (14:00 - 15:00) [336]  • PH		Seminar 1.  Methodology of work in public health I.:  • P15 - TOWN HALL  (10:00 - 13:00) [169]  • PH
Lecture 9: Health policy and Management: • P15 - TOWN HALL (15:00 - 16:00) [169] • PH		
doc. dr. sc. Roviš Darko, prof. [336] · prof. dr. sc. Rukavina Tor	nislav, dr. med. <sup>[169]</sup> · prof. dr. sc. Vasiljev Vanja,	dipl. sanit. ing. <sup>[333]</sup>
02.10.2024		

Lecture 10: Health care quality assessment, standards Exercise 1. Development of a public Seminar 2. and norms.: health programme/project for a specific Methodology of work in • ONLINE (09:00 - 10:00) [169] public health priority I.: public health II.: • ONLINE (12:00 - 14:15) [334] [1495] • ONLINE (14:30 o PH 17:00) [335] o PH Lecture 11: Determinants of health and health o PH indicators: • ONLINE (10:00 - 12:00) [335] Lecture 12: Leading public health challenges in the 21st century: • ONLINE (10:00 - 12:00) [335]  $\circ$  PH izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. [335] · dr.sc. Juraga Denis, mag. sanit. ing. [334] · dr.sc. Marinović Glavić Mihaela, mag. sanit.ing. [1495] · prof. dr. sc. Rukavina Tomislav, dr. med. [169] 03.10.2024 Lecture 13: Public health interventions, primary, secondary, and tertiary prevention.: • P02 (08:00 - 09:00) [333] Lecture 14: Social Welfare Law of the Republic of Croatia: • P02 (09:00 - 10:00) <sup>[333]</sup> o PH Lecture 15: Organisation of palliative care, hospice: • P02 (10:00 - 11:00) [335] Lecture 16: Health care planning, selection of priorities: • ONLINE (12:00 - 14:00) [335] o PH Lecture 17: Public health projects and programmes: • ONLINE (12:00 - 14:00) [335] o PH Lecture 18. Successful public health projects- SEFAC, **HORUS:** • ONLINE (14:00 - 15:00) [333] izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. [335] · prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. [333] 04.10.2024 Lecture 19: Example of research (EH-UH 2: Exercise 2. Development of a public Seminar 3. • P08 (08:00 - 11:00) <sup>[2836]</sup> health programme/project for a specific Methodology of work in public health priority II.: public health III.: • P08 (11:00 - 14:00) <sup>[1495]</sup> • P08 (14:00 - 17:00) Lecture 20: Public health campaigns - What's your [333] o PH number?; Hunt on a silent killer: o PH • P08 (08:00 - 11:00) [2836]

nasl.doc.dr.sc Jelaković Ana, dr.med. <sup>[2836]</sup> · dr.sc. Marinović Glavić Mihaela, mag. sanit.ing. <sup>[1495]</sup> · prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. <sup>[333]</sup>

o PH

o PH

Lecture 21: Lifestyle medicine:
• P08 (08:00 - 11:00) [2836]

07.10.2024	
Lecture 22: Health promotion and Behavioural Science: • P07 (08:00 - 11:00) [336]	Seminar 4.  Methodology of work in public health IV:
○ PH  Lecture 23: Health for All in the 21st Century:	• P07 (11:00 - 14:00) [336]
• P07 (08:00 - 11:00) [336]  • PH	○ PH   Seminar 5.
Lecture 24: Red Cross, International Organisations:  • P07 (08:00 - 11:00) [336]  • PH	Methodology of work in public health V.:  • v (14:00 - 17:00) [335] [1495]
	○ PH

izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. <sup>[335]</sup> · dr.sc. Marinović Glavić Mihaela, mag. sanit.ing. <sup>[1495]</sup> · doc. dr. sc. Roviš Darko, prof. [336]

#### 08.10.2024

Lecture 25: Health care in emergency situations:

• P07 (08:00 - 09:00) [333]

o PH

Lecture 26: Mental health and well being:

• P07 (09:00 - 10:00) [335]

∘ PH

Lecture 27: Health communication and Health literacy:

• P07 (10:00 - 11:00) [335]

o PH

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

• P08 (12:00 - 14:15) [334] [1495]

∘ PH

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

• P08 (14:15 - 17:00) [334] [1495]

o PI

izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. [335] · dr.sc. Juraga Denis, mag. sanit. ing. [334] · dr.sc. Marinović Glavić Mihaela, mag. sanit.ing. [1495] · prof. dr. sc. Vasiljev Vanja, dipl. sanit. ing. [333]

# 09.10.2024

Lecture 28: New technologies in Public Health:

• P15 - TOWN HALL (11:00 - 12:00) [1626]

 $\circ \ \mathsf{PH}$ 

Lecture 29-30: Final lecture with presentation of seminar papers, discussion on public health programmes/projects covered in seminar papers:

• P15 - TOWN HALL (12:00 - 14:00) [335] [169] [333] [334] [1495]

o PH

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

• P15 - TOWN HALL (08:00 - 11:00) [334] [1495]

o PH

izv. prof. dr. sc. Bilajac Lovorka, dipl. sanit. ing. <sup>[335]</sup> · dr.sc. Juraga Denis, mag. sanit. ing. <sup>[334]</sup> · dr.sc. Marinović Glavić Mihaela, mag. sanit.ing. <sup>[1495]</sup> · izv. prof. dr. sc. Maričić Sven <sup>[1626]</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:

LECTURES (TOPIC)	Number of hours	Location
Lecture 1: Definition and tasks of public 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: Organisation of the health care system; Legislation - Health Care Act of the Republic of Croatia.		ONLINE

Lecture 5: Basics of the health care contract with Croatian Health Insurance Fund.		ONLINE
Lecture 6: Health Care Financing, Economics in health care		ONLINE
Lecture 7: Public health research		P15 - TOWN HALL
Lecture 8: Health and social strategy and policy		P15 - TOWN HALL
Lecture 9: Health policy and Management		P15 - TOWN HALL
Lecture 10: Health care quality assessment, standards and norms.		ONLINE
Lecture 11: Determinants of health and health indicators		ONLINE
Lecture 12: Leading public health challenges in the 21st century		ONLINE
Lecture 13: Public health interventions, primary, secondary, and tertiary prevention.		P02
Lecture 14: Social Welfare Law of the Republic of Croatia		P02
Lecture 15: Organisation of palliative care, hospice		P02
Lecture 16: Health care planning, selection of priorities	1	ONLINE
Lecture 17: Public health projects and programmes		ONLINE
Lecture 18. Successful public health projects- SEFAC, HORUS		ONLINE
Lecture 19: Example of research (EH-UH 2		P08
Lecture 20: Public health campaigns - What's your number? ; Hunt on a silent killer	1	P08
Lecture 21: Lifestyle medicine	1	P08
Lecture 22: Health promotion and Behavioural Science	1	P07
Lecture 23: Health for All in the 21st Century	1	P07
Lecture 24: Red Cross, International Organisations	1	P07
Lecture 25: Health care in emergency situations	1	P07
Lecture 26: Mental health and well being		P07
Lecture 27: Health communication and Health literacy		P07
Lecture 28: New technologies in Public Health	1	P15 - TOWN HALL
Lecture 29-30: Final lecture with presentation of seminar papers, discussion on public health programmes/projects covered in seminar papers	2	P15 - TOWN HALL

PRACTICALS (TOPIC)		Location
Exercise 1. Development of a public health programme/project for a specific public health priority I.	3	ONLINE
Exercise 2. Development of a public health programme/project for a specific public health priority II.	3	P08
Exercise 3. Development of a public health programme/project for a specific public health priority III	3	P08
Exercise 4. Development of a public health programme/project for a specific public health priority IV.	3	P08
Exercise 5. Development of a public health programme/project for a specific public health priority V.	3	P15 - TOWN HALL

SEMINARS (TOPIC)	Number of hours	Location
Seminar 1. Methodology of work in public health I.	3	P15 - TOWN HALL
Seminar 2. Methodology of work in public health II.	3	ONLINE
Seminar 3. Methodology of work in public health III.	3	P08
Seminar 4. Methodology of work in public health IV	3	P07
Seminar 5. Methodology of work in public health V.	3	v

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