

<i>Name of the course</i>	Epidemiology and medical statistics			Code	
<i>Type of study program Cycle</i>	Integrated university study program, medicine			Year of study	VI
<i>Credits (ECTS) :</i>	4.5	<i>Semester</i>	XII	Number of hours per semester (l+e+s)	80 (25+45+0)
<i>Status of the course:</i>	mandatory	<i>Preconditions:</i>	passed all exams of the 5 th year	<i>Comparative conditions:</i>	
<i>Access to course:</i>	6 th year medical students			<i>Hours of instructions:</i>	according to schedule
<i>Course teacher:</i>	Ivan Vasilj, MD, PhD, assistant professor				
<i>Consultations:</i>	As agreed				
<i>E-mail address and phone number:</i>	ivanvasilj@net.hr				
<i>Associate teachers</i>	Davor Pehar, MD				
<i>Consultations:</i>	As agreed				
<i>E-mail address and phone number:</i>					
<i>The aims of the course:</i>	<p>The aims of this course are:</p> <p>To introduce medical students with statistical research, processing of statistical data and materials.</p> <p>To introduce students with the measurement of independent samples, analysis of numerical data, and introduce them with the descriptive, analytical, experimental and target research.</p> <p>Analyze the epidemiological measures; frequency measures, measures of association and formulate hypotheses in epidemiology.</p> <p>Explain models of infectious and mass non-infectious diseases control, and discuss about the importance of immunization.</p>				
<i>Learning outcomes (general and specific competences):</i>	<ul style="list-style-type: none"> • Synthesize the epidemiological and statistical research. • Analyzing epidemiological data. • Understanding how to apply all kinds of epidemiological and statistical research studies in practice. • Synthesis of hypotheses and aims. • Independently analyzing data and materials during epidemiological research. • Applying knowledge about the prevention of infectious and non-infectious diseases in practice. 				

	<ul style="list-style-type: none"> Analyzing, evaluating and applying the general concepts in epidemiology, epidemiological variables and studies. Adoption of skills from this course and recognition of the importance of the same, will be evaluated through seminars and practical exercises and on the final oral exam. 			
Course content (Syllabus):	Education during this course begins with lectures, followed by seminars and exercises. At the seminars, students get specific topics that they process in groups of 5-6 students. Seminars are exposed in groups and students discuss about the quality of completed tasks. During exercises students also work in groups and try to make practical tasks through interactive work.			
Format of instruction (mark in bold)	Lectures	Exercises	Seminars	Independent assignments
	Consultations	Work with mentor	Field work	Other
	Remarks:			
Student responsibilities				
Screening student work (mark in bold)	Class attendance	Class participations	Seminar essay	Practical training
	Oral exam	Written exam	Continuous assessment	Essay
Detailed evaluation within a European system of points				
STUDENTS RESPONSIBILITIES	HOURS	PROPORTIONS OF ECTS CREDITS	PROPORTION S OF MARK	
Class attendance and participations	25	1		
Seminar essay	45	1.5	20%	
Written exam	50	1.5	60%	
Oral exam	20	0.5	20%	
Further clarification:				
According to the regulations of the study, final grade is obtained:				
A = 91-100% 5				
B = 79 to 90% 4				
C = 67 to 78% 3				
D = 55 to 66% 2				
F = 0 to 54% 1				

Required literature:	Vasilj I. Selected chapters in epidemiology. University book. Mostar 2009. Puntarić D, Ropac D. Epidemiology of infectious diseases. Medical edition. Zagreb. 2010. Strand M, Vorko-Jović A, Rudan I. Epidemiology of chronic non – infectious diseases. Medical edition. Zagreb. 2010.
Optional literature:	Babuš V. Epidemiological methods, Medical edition, Zagreb, 2000. Bhopal R. Concepts of epidemiology: an integrated introduction to the ideas theories, principles and methods of epidemiology. Oxford, 2002. p 242. Cavaljuga S. Descriptive statistics. School of medicine. Sarajevo, 2011. Puvačić Z. Statistics in medicine. Sarajevo. 2004.
Additional information about the course	Monitoring methods of teaching quality: - student questionnaire - quality analysis by students and teachers - exam results analysis - report of the office for teaching quality - external evaluation (visit of team for quality control)

Annexes: calendar classes

The number of teaching units	TOPICS AND LITERATURE
I.	Title: Statistical research
	Short description: present statistical studies, the relative numbers, measures of central tendency and basic of probability
	Literature: required and optional
II.	Title: Health statistics
	Short description: basic data on the statistical test, sample and population
	Literature: required and optional
III.	Title: testing the differences between samples
	Short description: comparison of measurements from three or more independent samples, analysis of categorical data, analysis of connection through numerical data
	Literature: required and optional
IV.	Title: Health statistics
	Short description: health statistics, vital statistics, demographic statistics

	Literature: required and optional
V.	Title: Epidemiology
	Short description: introduction to history of epidemiology, definition and importance of epidemiology
	Literature: required and optional
VI.	Title: Epidemiological researches
	Short description: Analytical, experimental and meta-analysis
	Literature: required and optional
VII.	Title: Epidemiological characteristics
	Short description: epidemiological variables, Vogralik's chain, epidemiology of infectious diseases
	Literature: required and optional
VIII.	Title: Epidemiological measures
	Short description: types of epidemiological measures, frequency and correlation
	Literature: required and optional
IX.	Title: Control of infectious and non-infectious diseases
	Short description: epidemiology of mass non-infectious diseases, measures of frequency, connection and potential impact
	Literature: required and optional
X.	Title: Infections
	Short description: blood transmitted diseases, techniques of epidemiological control of hospital infections.
	Literature: required and optional
XI.	Title: Military epidemiology
	Short description: military epidemiology, clinical, molecular and genetic pharmacoepidemiology
	Literature: required and optional
XII.	Title: Vaccines
	Short description: planning of mandatory vaccination, optional vaccines, vaccination under certain epidemiological condition and importance of vaccines. DDD in the control of infectious diseases
	Literature: required and optional
XIII.	Title: Infectious diseases
	Short description: intestinal infectious diseases, anthroozoonosis, preventable infectious diseases.
	Literature: required and optional
XIV.	Title: Infectious diseases that threaten public health
	Short description: epidemiology of infectious diseases transmitted by insects
	Literature: required and optional
XV.	Title: Communication
	Short description: Importance of communication in epidemiology
	Literature: required and optional