

Course description

Part 1

General information about the course			
1. Major of study: medicine	2. Study level: unified MSc		
	3. Form of study: intramural		
4. Year: II	5. Semester: according to the schedule		
6. Course name: Hygiene and epidemiology			
7. Course status: required			
8. Course objectives Population health problems, epidemiology of selected diseases, descriptive epidemiology, analytical, environmental, clinical, interpretation of epidemiological studies, assessment of their reliability and the quality of scientific evidence; the impact of abiotic and biotic environmental factors on the human body; the impact of the social environment and social inequalities and socio-cultural differences on health; the role of stress in health and self-destructive behavior and the onset of disease; epidemiology of social diseases; methods of assessing individual and population health; hygiene and occupational medicine; food and nutrition hygiene; disease classification systems and medical procedures; identification of disease risk factors; use of databases and research of needed information using available tools; critical analysis of the literature; teamwork.			
Learning outcomes / reference to learning outcomes indicated in (underline as appropriate): <u>education standards (Regulation of the Ministry of Science and Higher Education) / Resolution of the Senate of the Medical University of Silesia (indicate terms specified in education standards / signs of learning outcomes approved by the Resolution of the Senate of the Medical University of Silesia)</u> For knowledge student knows and understands: B.W23, B.W24, B.W26, C.W11, C.W12, C.W13, C.W14, C.W34, C.W40, D.W2, D.W3, D.W19, E.W2, E.W31, E.W32, E.W34, E.W38, G.W1, G.W2, G.W3, G.W4, G.W21 For skills student can do: B.U8, B.U9, B.U10, B.U11, D.U5, E.U15, E.U18, E.U21, E.U28, G.U1, G.U2, G.U3, G.U4, G.U10 For social competencies student is ready to: D.U4, D.U7			
9. Number of hours for the course	45	10. Number of ECTS points for the course	3
11. Form of evaluation: exam			
12. Methods of verification and evaluation of learning outcomes			
Learning outcomes	Methods of verification	Methods of evaluation*/ credit	
Knowledge	Written evaluation – open questions Grade credit – MCQ <u>Summary methods:</u> Written exam / test exam	*	
Skills	Observation	*	
Competencies	Observation	*	

* For exams and grade credits the following evaluation system has been assumed:

Very good (5,0) – the assumed learning outcomes have been achieved and significantly exceed the required level

Better than good (4,5) – the assumed learning outcomes have been achieved and slightly exceed the required level

Good (4,0) – the assumed learning outcomes have been achieved at the required level

Better than satisfactory (3,5) – the assumed learning outcomes have been achieved at the average required level

Satisfactory (3,0) – the assumed learning outcomes have been achieved at the minimum required level

Unsatisfactory (2,0) – the assumed learning outcomes have not been achieved

Course description

Part 2

Other useful information concerning the course		
13. Department conducting the course, address, e-mail address: Department of Epidemiology, 18 Medyków St., 40-752 Katowice, epikat@sum.edu.pl		
14. Course Coordinator: Prof. dr hab. n. med. Grzegorz Brożek		
15. Prerequisites in terms of knowledge, skills and other competences: No requirements for prior skills and/or competencies		
16. Group size	In accordance with the SUM Senate Resolution	
17. Teaching materials	Presentations available on e-learning platform	
18. Location of classes	18 Medyków St., 40-752 Katowice Building c3, IV floor, classrooms: 401, 412, Building d2, I floor, classroom 122/123	
19. Location and time of office hours	Building C3, IV floor, 9:00 – 12.00	
20. Learning outcomes		
Number of the course learning outcome	Course learning outcomes	Reference to the learning outcome included in the standards
In terms of knowledge (students know):		
C_K01	Basic IT and biostatistical tools used in medicine	B.W23
C_K02	Basic methods of statistical analysis used in population and diagnostic studies	B.W24
C_K03	Principles of conducting scientific research for the development of medicine	B.W26
C_K04	Epidemiology of infections caused by viruses, bacteria, fungi and prions, and parasite infestations, taking into account the geographical extent of their occurrence	C.W11
C_K05	Pathogenesis and pathophysiology of infections and the influence of pathogenic factors, viruses, bacteria, fungi, prions and parasites, on the human body population, including how they are affected, the consequences of exposure to them, and the principles of prevention;	C.W12
C_K06	Consequences of exposure of the human body to chemical and physical factors and principles of prevention	C.W13
C_K07	Etiology, pathogenesis, pathophysiology, transmission routes, forms and prevention of infections iatrogenic	C.W14
C_K08	Basic concepts in general toxicology	C.W34
C_K09	Causes and consequences of improper nutrition, including long-term ones insufficient and excessive consumption of food and the use of unbalanced food diets and digestive and absorption disorders	C.W40
C_K10	Concepts of health and disease, the influence of the social environment (family, work, relationships social) and socio-cultural conditions (origin, status social status, religion, nationality and ethnic group) on the patient's health condition	D.W2
C_K11	Human behavior conducive to maintaining health and principles of	D.W3

	motivation patient to pro-health behaviors (Prochaska and DiClemente's change model, motivational interview)	
C_K12	Principles of evidence-based medicine	D.W19
C_K13	Principles of prevention of diseases occurring in children, including screening tests, balance tests and protective vaccinations	E.W2
C_K14	Basic issues of prevention and principles of treatment occupational exposure to dangerous and harmful factors	E.W31
C_K15	Rules of conduct in the event of suspicion and detection of an infectious disease	E.W32
C_K16	Rules of conduct in the event of exposure to potentially infectious material	E.W34
C_K17	Principles of health-promoting behavior, basics of prevention and early detection the most common lifestyle diseases and the principles of screening for them diseases	E.W38
C_K18	Methods for assessing the health of individuals and populations, measures and principles of monitoring population health status, disease classification systems and medical procedures	G.W1
C_K19	Determinants of diseases, methods of identifying and examining disease risk factors, advantages and disadvantages of epidemiological research and the principles of cause-and-effect inference in medicine	G.W2
C_K20	Epidemiology of infectious diseases, including those related to health care, and non-infectious diseases, types and methods of prevention at various stages of natural history diseases and the role and principles of epidemiological surveillance	G.W3
C_K21	The concept and functions of public health, the concept, tasks and methods of promotion health, the concept of quality in health care and factors influencing it, structure and organization of the health care system at the national and global level, as well the impact of economic conditions on health care opportunities	G.W4
C_K22	Epidemiology of cancer diseases, in particular their determinants nutritional, environmental and other lifestyle factors affecting risk oncology	G.W21
In terms of skills:		
C_S01	Use medical databases and properly interpret the information contained therein information needed to solve problems in basic science and clinical	B.U8
C_S02	Select the appropriate statistical test, perform basic statistical analyses and use appropriate methods for presenting results	B.U9
C_S03	Classify the methodology of scientific research, including distinguishing between studies experimental and observational, along with their subtypes, rank them according to degree credibility of the results provided and correctly assess the strength of the evidence scientific	B.U10
C_S04	Plan and perform scientific research and interpret and formulate its results conclusions	B.U11
C_S05	Describe the demographic structure of the population and evaluate and predict on this basis population health problems	G.U1
C_S06	Collect information on the conditions and presence of disease risk factors infectious and non-infectious diseases and plan preventive activities at different levels level of prevention	G.U2
C_S07	Interpret positive and negative measures of health	G.U3
C_S08	Assess the epidemiological situation of infectious and non-communicable diseases in the Poland and in the world	G.U4

C_S09	Organize the work environment in a way that ensures patient safety and other people, taking into account the influence of human factors and ergonomic principles	G.U10
C_S10	Critically analyze medical literature, including in English, and draw conclusions	D.U5
C_S11	Use personal protective equipment appropriate to the clinical situation	E.U15
C_S12	Store the patient's medical records, including in electronic form, in accordance with legal provisions	E.U18
C_S13	Conduct health education for the patient, including nutritional education adapted to individual needs	E.U21
C_S14	Identify social determinants of health, indicators of behavior occurrence anti-health and self-destructive activities, discuss them with the patient and prepare them note in the medical records	E.U28
In terms of social competencies:		
C_C01	Demonstrate responsibility for improving their qualifications and transferring them knowledge to others	D.U4
C_C02	Develop and improve self-awareness, self-reflection and self-care and reflect with others on your own way of communicating and behavior	D.U7
21. Forms and subjects of classes		Number of hours
21.1. Lectures		10
Epidemiology and its contribution to medical research		3
Epidemiology and its contribution to public health		3
Screening test		2
Environmental epidemiology		2
21.2. Seminars		10
Descriptive epidemiology		2
Occupational medicine		2
Interpretation results of epidemiological studies		1
Clinical epidemiology		1
Epidemiology of infectious disease		1
Nutrition epidemiology		1
Analytical epidemiology		1
Environmental epidemiology		1
21.3. Labs		25
Descriptive epidemiology		3
Occupational medicine		3
Interpretation results of epidemiological studies		3
Clinical epidemiology		3
Epidemiology of infectious disease		3
Nutrition epidemiology		3
Analytical epidemiology		3
Environmental epidemiology		4
22. Literature		
Required literature: WHO, Beaglehole R.: Basic Epidemiology, 2006		
Supporting literature:		
23. Assessment criteria - details		
Final MCQ test		