

## 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: III		5. Semester: V	
6. Course name: Environmental Health			
7. Course status: required			
8. Course objectives			
The course objectives are to teach students the principal concepts of environmental health, the impact of environmental factors on health and their role among risk factors of diseases, as well as to review opportunities for preventive measures. The outcomes of the course include: a) knowledge about basic methods used to assess the contribution of environmental factors to health and its disorders, including major diseases; b) understanding the role of life-style and physical and chemical factors in etiology of diseases; c) awareness of environmental exposure history in medical examination of patients. The specific topics include goals of environmental health, concept of environmental medicine, concept of occupational medicine, environmental burden of diseases, nutrition and eating disorders, stress, air pollution, water pollution, methods of environmental health risk evaluation (environmental epidemiology, biomonitoring, risk assessment).			
Learning outcomes / reference to learning outcomes indicated in (underline as appropriate): 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) For knowledge student knows and understands: C.W14 Effect of environmental factors on human organism and the population, including routes of exposure C.W15 Consequences of human exposure to various chemical and biological factors, including preventive procedures C.W33 Internal and external harmful factors, both modifiable and nonmodifiable For skills student can do: C.U6 Assessment of environmental health risk and application of basic methods used to identify harmful chemical and physical factors in the environment G.U2 Collecting information on the occurrence of risk factors of infectious and chronic diseases, planning preventive measures on different levels of preventive programmes For social competencies student is ready to: communicate the results of environmental health studies to the patients, collaborate in a research teams and participate in a research report preparation, in the field of environmental health/environmental medicine.			
9. Number of hours for the course		50	10. Number of ECTS points for the course
			4
11. Form of evaluation: credit			
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		*
Skills	Report Observation Practical exam		*
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, <a href="mailto:epikat@sum.edu.pl">epikat@sum.edu.pl</a>		
14. Course Coordinator: Professor Grzegorz Brożek, MD, PhD		
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:		
C_K01	Effect of environmental factors on human organisms and the population, including routes of exposure	C.W14
C_K02	Consequences of human exposure to various chemical and biological factors, including preventive procedures	C.W15
C_K03	Internal and external harmful factors, both modifiable and nonmodifiable	C.W33
In terms of skills:		
C_S01	Assessment of environmental health risk and application of basic methods used to identify harmful chemical and physical factors in the environment	C.U6
C_S02	Collecting information on the occurrence of risk factors of infectious and chronic diseases, planning preventive measures on different levels of preventive programs	G.U2
In terms of social competencies:		
C_C01	communicate the results of environmental health studies to the patients, collaborate in a research teams and participate in research report preparation, in environmental health/environmental medicine	
21. Forms and subjects of classes		Number of hours
21.1. Lectures		10
Environmental burden of diseases		2
Introduction to environmental health		2
Non-communicable diseases		2
Occupational Health		2
Healthy lifestyle		2

<b>21.2. Seminars</b>	<b>16</b>
Air pollution	2
Injuries	2
Health effects of social stress	2
Diet – related diseases	2
Water and health	2
Workplace health and safety	2
Urbanization	2
Health effects of alcohol consumption	2
<b>21.3. Labs</b>	<b>24</b>
Radiation	2
Health effects of xenobiotics	2
Assessment of population health status	2
Healthy diet	2
Nutrition	2
Determinants of health	2
Bulimia, anorexia, obesity	2
Health effects of air pollution	2
Biomonitoring	2
Risk assessment	2
Food contamination	2
Health effects of tobacco smoking	2
<b>22. Literature</b>	
<b>Required literature:</b> Frumkin H.: Environmental Health: From Global to local, John Wiley and Sons. ISBN: 9781118984765 WHO, Beaglehole R.: Basic Epidemiology, 2006 <b>Supporting literature:</b> Centers of Disease Control and Prevention (CDC.gov) resources	
<b>23. Assessment criteria - details</b>	
Students activity and internal tests during selected classes.	