



WL10-209/2019

UNIWERSYTET MEDYCZNY

IM. PIASTÓW ŚLĄSKICH WE WROCŁAWIU

KATEDRA I ZAKŁAD HIGIENY

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Załącznik nr 5

do Uchwały Senatu Uniwersytetu Medycznego

we Wrocławiu nr 1630

z dnia 30 marca 2016 r.

## Syllabus 2019/2020

## Description of the course

Module/Course	Group of detailed education results		
	HYGIENE AND EPIDEMIOLOGY	Group code G	Group name Prawne i organizacyjne aspekty medycyny
Faculty	Medicine		
Major	medicine		
Specialties	not applicable		
Level of studies	Uniform magister studies X*		
Form of studies	X full-time		
Year of studies	II	Semester	Winter X
Type of course	obligatory X		
Course	basic X		
Language of instruction	English X		

\* mark  with an X

## Number of hours

## Form of education

Unit teaching the course	Lectures (L)	Seminars (SE)	Auditorium classes (AC)	Major Classes – not clinical (MC)	Clinical Classes (CC)	Laboratory Classes (LC)	Classes in Simulated Conditions (CSC)	Practical Classes with Patient (PCP)	Specialist Classes – magister studies (SCM)	Foreign language Course (FLC)	Physical Education obligatory (PE)	Vocational Practice (VP)	Self-Study (Student's own work)	E-learning (EL)
<b>Winter Semester</b>				30										
<b>Summer Semester</b>				0										
<b>TOTAL per year: 30</b>				30										

## Educational objectives (max. 6 items)

- C1. Basic knowledge of healthy lifestyle, work and learning, hand hygiene.
- C2. To provide the students with knowledge of basic concepts in epidemiology, types of epidemiological phenomena and methods of examining them. Acquiring the ability of epidemiological study design, analyzing of epidemiological data and the use of epidemiological information for the evaluation of population health status.
- C3. To understand the epidemiology of contagious and non-contagious diseases, principles of conducting an epidemiological inquiry and surveillance, and how to plan actions in the scope of disease prevention and health promotion.
- C4. To make students aware of health risks (for patients and medical staff) related to health care settings.
- C5. To understand the principles of nutrition and food hygiene. Knowledge of nutritional deficiencies and the importance of diet for the health. Food-borne diseases.
- C6. Knowledge of environmental hygiene (in the place residence, work and education), mental hygiene (stress and coping with it, sleep hygiene, addictions), childhood and adolescent hygiene, hygiene of aging, and tropical medicine and hygiene.

## Education result matrix for module/course

## in relation to verification methods of the intended education result and the type of class

Number of course education result	Number of major education result	Student who completes the module/course knows/is able to	Methods of verification of intended education results (forming and summarising)	Form of didactic class **enter the abbreviation
K 01	G.W1	Knows how to assess the health status of individuals and populations,	During the oral answers, presentations, written tests and exam student can	MC



		describes the demographic structure of the population, on that basis identifies the health problems of the population; defines risk, is able to assess epidemiological status of a country.	explain indicated issues eg. determine which factors influence on the state of health of the population and the prevalence of diseases; determinate and calculate of the indicators of the status of population health /for given data/.	
K 02	G.W2	Is able to design epidemiological study, its aims. Collects information on diseases and plans preventive measures. Is able interpret statistical data and knows how to use statistical data. Knows the principles of health promotion, defines the objectives of primary and secondary prevention.	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. on the basis of the given data and the indicated aim of research , it is able to plan an appropriate epidemiological study.	MC
K 03	G.W3	Knows how to construct simple programmes and recommendations to promote health, according to the needs of the diagnosed epidemiological problems.	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. interpret the given data, provide conclusions, and define the objectives of surveillance and epidemiological control.	MC
K 04	G.W5	Defines the objectives of primary and secondary prevention, knows how to construct simple programs and recommendations for health promotion and selected specifically to the needs of epidemiological problems diagnosed.	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. discusses and / or recognizes examples of primary and secondary prevention; explains the importance of nutrition and lifestyle in the prevention and development of diseases.	MC
K 05	G.W13	Knows methods for the identification and study of risk factors, advantages and disadvantages of different types of epidemiological studies, and measures of the presence of cause-and-effect evidence; uses statistics, knows how to interpret EBM, properly uses publications choosing the most valuable sources.	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. discusses and / or recognizes the types of different epidemiological studies, gives their advantages and disadvantages, estimates the risk for the given data: calculates absolute risk, relative risk, odds ratio, attributable risk and gives interpretations of the obtained results.	MC
K 06	G.W19	Knows the rules of collection of material for toxicological and hemogenetic studies, knows hospital hygiene and waste management, knows epidemiology infections and non-infectious diseases and control agencies.	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. identifies the causes and effects of nosocomial infections, discusses the rules and stages of hygienic and surgical hand washing as well as the most common mistakes made, discusses the rules for the utilization of hospital waste; provides principles of prophylaxis at various stages of the natural history of the disease and the role of epidemiological surveillance.	MC
S 01	G.U1	Uses various demographic sources, describes the demographic structure of the population, on that basis identifies the health problems of the population.	During his own work and during classes, the student is able to use demographic and literature sources, presents a paper or a presentation on a given topic.	MC
S 02	G.U2	Collects information on the presence of risk factors of infectious and chronic diseases and plans preventive actions at different levels of prevention. Gathers information on the environmental exposure to health	During the oral answers, presentations, written tests and exam student can explain indicated issues eg. discuss the aetiology and risk factors of infectious diseases, explain the importance of factors that disrupt health (noise,	MC



		disturbing factors (noise, exposure to toxins, heavy metals, vibration, etc.).	exposure to toxins, heavy metals, vibrations, etc.). During classes /while working in groups / knows how to collect the right information and can conduct epidemiological interview for a given epidemiological problem.	
S 03	G.U6	Observes the hygiene rules to avoid making a medical mistake and plans of preventive action at different levels of prevention.	During the oral answers, presentations, written tests and exam student can identify hazards at various workplaces, including those related to the performance of medical professions, give rules for prevention at various workplaces.  While working in classes / in groups/ is able to plan preventive actions for a given health problem.  On practical exercises; is able to perform the correct procedure for washing/disinfect hands.	MC

\*\* L - lecture; SE - seminar; AC – auditorium classes; MC – major classes (non-clinical); CC – clinical classes; LC – laboratory classes; SCM – specialist classes (magister studies); CSC – classes in simulated conditions; FLC – foreign language course; PCP practical classes with patient; PE – physical education (obligatory); VP – vocational practice; SS – self-study, EL – E-learning.

Please mark on scale 1-5 how the above effects place your classes in the following categories: communication of knowledge, skills or forming attitudes: **Knowledge: 5, Skills: 4.**

**Student's amount of work (balance of ECTS points)**

<b>Student's workload</b> (class participation, activity, preparation, etc.)	<b>Student Workload (h)</b>
1. Contact hours:	30
2. Student's own work (self-study):	51
Total student's workload	81
<b>ECTS points for module/course</b>	<b>4.5</b>

**Comments:** not applicable

**Content of classes** (please enter topic words of specific classes divided into their didactic form and remember how it is translated to intended educational effects)

Lectures - not applicable

Seminars - not applicable

**Major classes – not clinical**

- 1MC. Hygiene and epidemiology. Definitions, targets, tasks. Determinants of health. Principles of health promotion and disease prevention. Population health indicators. (2 lesson hours =1h 30 min)
- 2MC. Types of epidemiological studies. Causal inference. (2 lesson hours =1h 30 min)
- 3MC. Calculation of epidemiological indicators. Measuring risk and risk assessment methods and odds ratio. Standardization. (2 lesson hours =1h 30 min)
- 4MC. Epidemiology of infectious diseases. Proceedings in the outbreak of the epidemic. Prevention of infectious diseases. (2 lesson hours =1h 30 min)
- 5MC. Occupational hazards to health (physical, chemical, biological); risk assessment. Occupational hazards at health care workplaces. (2 lesson hours =1h 30 min)
- 6MC. Nosocomial infections - epidemiology. Hygiene measures for health professions workforce. Hand hygiene. Cleaning and disinfection. Disease of dirty hands - exercises using UV lamp. (2 lesson hours =1h 30 min)
- 7MC. Principles of food hygiene. Energy demand, primary and secondary metabolism - calculation of the energy requirement of students. Disorders of the nutritional status and their impact on health. (2 lesson hours =1h 30 min)
- 8MC. The role of life style and nutrition in the diseases development and prevention. Acquiring and applying knowledge of nutrition based on literature - exercises with the ability to use professional literature. (2 lesson hours =1h 30 min)
- 9MC. External environmental factors affecting the body's functioning, with particular emphasis on natural factors. (2 lesson hours =1h 30 min)
- 10MC. Water pollution - pathogen. Biological significance of water. The shortage of water in the world -



statistics. The harmfulness of biological and chemical factors in the wastewater. Water treatment, water quality status indicators - interpretation of study results. (2 lesson hours =1h 30 min)  
11MC. Colloquium. (2 lesson hours =1h 30 min)  
12MC. Factors affecting health indoors. Sick buildings syndrome. (2 lesson hours =1h 30 min)  
13. Epidemiology of selected non-infectious diseases. Risk factors for these diseases. (2 lesson hours =1h 30 min)  
14MC. Occupational health and safety. Personal protection devices. Elements of ergonomics. (2 lesson hours =1h 30 min)  
15MC. Classes allowing individual catch up due to absenteeism student. (2 lesson hours =1h 30 min) (2 lesson hours =1h 30 min)

Other - not applicable

**Basic literature** (list according to importance, no more than 3 items)

1. Bonita R., Beaglehole R., Kjellstrom T. Basic Epidemiology. 2<sup>nd</sup> ed. Geneva: World Health Organization; 2006
2. Population Health: Concepts and Methods. – T. Kue Young 2004 Oxford University Press
3. Lippmann M (ed.). Environmental Toxicants – Human Exposures and Their Health Effects. 3rd ed. Hoboken: John Wiley & Sons, Inc.; 2009

**Additional literature and other materials** (no more than 3 items)

1. European Centre for Disease Prevention and Control. Annual Epidemiological Report on Communicable Diseases in Europe 2010. Stockholm: ECDC; 2010
2. Epidemiology for Public Health Practice. – Robert H. Friis, Thomas Sellers, 2013, Jones & Bartlett Learning
3. Snashall D., Patel D (eds.) ABC of Occupational and Environmental Medicine. 2<sup>nd</sup> ed. London: BMJ Publishing Group; 2003

**Didactic resources requirements** (e.g. laboratory, multimedia projector, other...)

Multimedia projector, projection screen, internet access, flipchart.

**Preliminary conditions** (minimum requirements to be met by the student before starting the module/course)

Basic knowledge of the medical statistics. Knowledge of human physiology and biology, basic knowledge of medical biochemistry.

**Conditions to receive credit for the course** (specify the form and conditions of receiving credit for classes included in the module/course, admission terms to final theoretical or practical examination, its form and requirements to be met by the student to pass it and criteria for specific grades)

**Each absence must be made up, including rector's days or dean's hours.**

Admission to the exam:

- Completion exercises - assessed individual activity, relationship to the subject and teaching staff, and colleagues.
- Presence in all of seminars, alternatively: studying independently missing topics and making up the missing classes (no more than 2).
- Active participation in seminars and group-work.
- Positively passing all written colloquia.
- Preparing and presenting at least 1 presentation concerning assigned topic.

Completion of the course Hygiene and Epidemiology: a positive result of the written test consisting of 60 questions – positive rating is 60% correct answers.

Grade:	Criteria for course
Very Good (5.0)	Presence at all classes or making up the missing classes (no more than 2), activity in classes, weighted average of partial grades (i.a. colloquies/short tests/presentations/oral answers): $\geq 4.75$
Good Plus (4.5)	Presence at all classes or making up the missing classes (no more than 2), activity in classes, weighted average of partial grades (i.a. colloquies/short tests/presentations/oral answers): 4.5 – 4.74
Good (4.0)	Presence at all classes or making up the missing classes (no more than 2), activity in classes, weighted average of partial grades (i.a. colloquies/short tests/presentations/oral answers): 4.0 – 4.4
Satisfactory Plus (3.5)	Presence at all classes or making up the missing classes (no more than 2), activity in classes, weighted average of partial grades (i.a. colloquies/short tests/presentations/oral answers): 3.5 – 3.9
Satisfactory (3.0)	Presence at all classes or making up the missing classes (no more than 2), weighted average of partial grades (i.a. colloquies/short tests/presentations/oral answers): 3.0 – 3.4



Grade:	Criteria for exam
Very Good (5.0) Test result $\geq 92\%$ of correct answers	<b>EXPECTED KNOWLEDGE</b> Knowledge of the issues raised in lectures and exercises. Knowledge of the basic literature textbooks. Knowledge of supplementary literature. Ease to move through the issues of hygiene and epidemiology. Use of applications and deriving solutions from the data source.
Good Plus (4.5) Test result 86% - 91% of correct answers	
Good (4.0) Test result 79% - 85% of correct answers	<b>KNOWLEDGE INDICATED</b> Knowledge of the issues raised in lectures and exercises. Knowledge of knowledge of the basic literature textbooks. Knowledge of supplementary literature.
Satisfactory Plus (3.5) Test result 71%-78% of correct answers	
Satisfactory (3.0) Test result 60% - 70% of correct answers	<b>KNOWLEDGE REQUIRED</b> Knowledge of the issues raised in lectures and exercises. Knowledge of knowledge of the basic literature textbooks.

<b>Name of unit teaching course:</b>	Chair and Department of Hygiene Faculty of Medicine, Wrocław Medical University
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<b>Person responsible for course:</b>	Prof. dr hab. Krystyna Pawlas
Phone	+4871 784 0105, +4871 784 1501
E-mail	krystyna.pawlas@umed.wroc.pl

List of persons conducting specific classes:	Degree/scientific or professional title	Discipline	Performer profession	Form of classes
Krystyna Pawlas	Profesor	Health sciences	Academic teacher	Classeas
Agata Kawalec	Doktor	Medical sciences	Academic teacher	Classeas
Jakub Krzeszowiak	Doktor	Health sciences	Academic teacher	Classeas
Anna Kawalec	Lekarz	Medical sciences	PhD student	Classeas
Małgorzata Chowaniec	Lekarz	Medical sciences	PhD student	Classeas
Fryderyk Menzel	Lekarz	Medical sciences	PhD student	Classeas

Date of Syllabus development  
26 June, 2019

Syllabus developed by  
Krystyna Pawlas, Prof. PhD

Signature of Head of teaching unit

Uniwersytet Medyczny we Wrocławiu  
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kierownik  
*Krystyna Pawlas*  
prof. dr hab. Krystyna Pawlas

Signature of Faculty Dean

Wrocław Medical University  
FACULTY OF MEDICINE  
VICE-DEAN FOR STUDIES IN ENGLISH  
*Andrzej Hendrich*  
Prof. Andrzej Hendrich, PhD