Syllabus of the training module at the university level

Name of the Faculty	Faculty of Medicine Jagiellonian University Medical College
Name of the unit conducting the module	Department of Toxicology and Environmental Diseases
Name of the training module	Occupational Health
Module code	
Language of training	English
Education effects for the training module	Upon completion of the course the student: <u>in the frame of knowledge:</u> • will have knowledge of the rules in force in occupational medicine, such as admission to work, retirement from work, periodic testing, diagnosis of occupational diseases • demonstrate understanding of medico-legal aspects underpinning the recognition of occupational diseases • uses knowledge of the laws of physics to explain the impact of external factors such as temperature, acceleration, pressure, electromagnetic fields and ionizing radiation on the body and its elements • knows the effect of abiotic and biotic (viruses, bacteria) environmental factors on the organism and population and the way their penetration into the human body; can describes the consequences of exposure of the human body in a variety of chemical and biological agents and the principle of prevention • listing internal and external pathogens, modifiable and non-modifiable • knows and understands the importance of environmental xenobiotics with regard to their exogenous transformation and the role of biomarkers (exposure, effects, sensitivity) in the diagnosis of occupational and environmental diseases <u>In the frame of skills:</u> • carries out the medical inteview with adult patient suspected of occupational disease • can conduct environmental intelligence, knows how to interpret the levels of pollutants in terms of current standards and is able to indicate organs and systems susceptible to the harmful effects of various xenobiotics present in the living and working environment • sets out the diagnostic, therapeutic and preventive tests aimed at the diagnose or exclusion of occupational disease • interpret laboratory tests and identify the reasons for the deviations • is able to assess the harmfulness of non-ionizing radiation doses, ionizing and other physical factors acting on the body and apply the principles of radiation protection • assesses environmental threats and uses basic methods allowing to detect the presence of harmful factors (biological and chemical) in the biosphere • can perform basic medical procedures and treatments, including: spirometry, getting swabs from the nose, throat and skin, • assists in carrying out the following procedures and

	medical treatments: epidermal tests, intradermal tests and scarification and interprets the results • can keep all patient's medical records in the recognition and prevention of occupational diseases • uses the reaction of antigen - antibody in current modifications and techniques for the diagnosis of occupational allergic diseases • is able to assess the credibility of the clinical trial <u>in frame of social competence:</u> • ability to conduct guidance • ability to cooperate with other medical specialties
Type of training module (mandatory/facultative)	mandatory
Year of study	4
Semester	7,8
Name of the person leading the module	Ewa Czarnobilska MD PhD, Małgorzata Sacha MD PhD, Marcin Stobiecki MD PhD, Grzegorz Porębski MD PhD, Barbara Balicka MD PhD; Dorota Myszkowska MD PhD, Wojciech Dyga
Name of the person examining or granting a credit if it is not the person conducting the module	Ewa Czarnobilska MD PhD
Methods of performance	Classes with the participation of the teacher: • lectures • seminars, • exercise
Initial and additional requirements	Basic knowledge of internal medicine, ENT, dermatology, allergy including symptomatology and diagnosis of diseases of professional background. Knowledge of the pathophysiological processes, including imunology of allergic diseases, intolerance reactions and mechanisms of toxic
Type and number of class hours that require direct involvement both teacher and students, when such activities are provided for the module	Lectures - 10 hours (teacher participation 100%) seminars - 4 (teacher participation 100%) Exercises - 6 (teacher participation 100%)
Number of ECTS credits allocated to the module	1 ECTS
Balance of ECTS points	Participation in lectures: 10 hours Participation in exercises: 6 hours Participation in seminars: 4 hours Preparation for the seminar: 8 hours Preparation for the exam: 2 hours
Teaching methods applied	lectures, seminars, exercises
Methods for testing and evaluation criteria for learning outcomes achieved by students	Final test: In the frame of knowledge: Single-choice test when to get a credit student have to obtain 60% correct answers
Form and conditions for module passing, including the rules of admission to the exam, pass, and the form and condition for completion of the various activities within the scope of the module	Passing the module requires the following conditions: - attendance (limit is a maximum of 1 excused absence) - activity in the classroom evaluated (0-10pkt) - obtain at least 60% correct answers on a test checking knowledge

Training module content	• Defining occupational disease and the base of recognition (the legal and medical aspects) • Diseases pseudo-professional • Epidemiology of occupational diseases • Pneumoconiosis. Lung diseases caused by hard metals, triggered by man-made fibers. Berylliosis. Byssinoza. • Metal fever • Diseases caused by the action of physical factors: ionizing radiation, electromagnetic fields, infrasound and ultrasound, high and low temperature, high and reduced atmospheric pressure. Vibration syndrome. • Tumors of occupational origin • Occupational poisoning by heavy metals (lead, mercury) • Occupational exposure to hydrocarbons • Infectious diseases of occupational origin • Allergic occupational origin of the disease: pathogenesis of occupational allergy. Characteristics of occupational allergens. Interview and allergy diagnostics in occupational diseases.Skin tests with allergens professional point and patch. Specific and non-specific provocation tests. Occupational asthma. Allergic alveolitis. COPD. Professional anaphylaxis. Occupational skin diseases, respiratory allergic. • Issues working environment: environmental and professional monitoring.
Basic and supplementary bibliography to complete the module	1. N. Szeszenia-Dąbrowska U. Wilczyńska, W. Sobala: Choroby zawodowe w Polsce w 2013 r. i ich czynniki przyczynowe. Occupational diseases in Poland in 2013 and their causative agents. Med. Pracy 2014;65(4), 317-326. 2. N. Szeszenia-Dąbrowska, U. Wilczyńska, Occupational diseases in Poland – An overview of current trends. Int J Occup Med Environ Health. 2013 26(3): 457-470. 3. Szeszenia-Dabrowska N, Wilczyńska U. Occupational diseases among workers employed in various branches of the national economy. Med. Pr. 2013;64(2):161-74 4. Textbook of Occupational Medicine Practice – 3rd edition, may 2011; Koh David, Takahashi Ken; 5. ABC of Occupational and Enviromental Medicine, Snashall David, Patel Dipti; BMJ Publishing Group 2003, second edition; www.bmjbooks.com; 6. Hunter's Diseases of Occupations, Tenth Edition 2010; Peter J Baxter , Tar-Ching Aw , Anne Cockcroft, Paul Durrington , J Malcolm Harrington;
Dimension, principles and form of awarded for practice when the training program provides practice	Not applicable