

Identification and Analysis of Biological Treats

profile	general academics
degree	first degree
programme	ERASMUS
semester	1
part time / full time	full time
ECTS	3
coordinator	st. bryg. dr inż. Anna Prędecka

form of the activity: exercise

hours	15
prerequisites	Knowledge of biological factors occurring in the natural environment and the work environment.
objectives	The aim of the education is to acquire the ability to identify threats from biological factors, the ability to select individual and collective protection measures against biological factors for various work stations. The expected effect of the education is the ability to conduct a risk analysis in exposure to occupational biological harmfulness by taking appropriate preventive and preventive actions in the area of occupational health and safety.
methods	Lecture – multimedia presentation, Exercises – independent development of indicated issues (problem solution), presentation of the issue.
own work	Studying the literature, developing the indicated issues (solving the problem), preparing a presentation on a topic assigned by the lecturer, preparing to pass the subject.
basic literature	Prędecka Anna. Identyfikacja i analiza zagrożeń biologicznych. Wydawnictwo SGSP, Warszawa 2014; Jankowska E., Pośniak M. Zespół chorego budynku. Ocena parametrów środowiska pracy. Wydawnictwo CIOP-PIB, Warszawa 2007; Błaszczak M. Mikrobiologia środowisk. Wydawnictwo Naukowe PWN, Warszawa 2010; Błaszczak M. Mikroorganizmy w ochronie środowiska. Wydawnictwo PWN, Warszawa 2010; Markiewicz Z. Mikrobiologia: różnorodność, chorobotwórczość i środowisko. Wydawnictwo PWN, Warszawa 2003.
supplementary literature	J. Nicklin, K. Graeme-Cook, R. Killington; „Mikrobiologia. Krótkie wykłady” PWN 2007, Eligia M. Szewczyk; „Diagnostyka bakteriologiczna” PWN 2007r.

contents	hours
Bioaerosol Sampling Techniques. Sampling Methods from Microbiologically Contaminated Surfaces Methods for Determining the Species Composition of Microbiological Samples Microscopic Methods Cultivation Methods Metabolic and Molecular Methods Methods for Determining the Concentration of Endotoxins in Air Methods for Determining Mycotoxins and Other Toxic Compounds of Microbial Origin Methods for Determining the Concentration of Allergens in Air.	10

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contents	hours
Legal regulations regarding biological factors.	2
Characteristics of biological factors occurring in the work environment.	4
Quantitative and qualitative methods for assessing harmful biological factors.	4
Occupational groups exposed to biological factors.	2
Risk analysis in exposure to biological factors.	2
Knowledge test	1