



## OPIS PRZEDMIOTU

<b>FIELD OF STUDY</b>	<b>Management</b>
<b>SPECIALISATION</b>	Occupational health and safety management
<b>MODE OF STUDY</b>	Full-time studies / Part-time studies
<b>SEMESTER</b>	6

<b>Name of the subject</b>	<b>Risk analysis and assessment</b>
<b>Hourly dimension of particular forms of classes</b>	Full-time studies – 30 Part-time studies – 18
• <b>lectures</b>	Full-time studies – 10 Part-time studies – 8
• <b>other forms</b>	Full-time studies – 20 Part-time studies – 10

<b>Learning objectives:</b>	- to provide basic knowledge of occupational risk assessment, taking into account the legal requirements in this area - to show students the need to understand the culture of safety at work and to teach methods of assessing and documenting occupational risks present in the working environment
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<b>Learning outcomes for the subject</b>		<b>Reference of learning outcomes for the programme</b>	<b>The reference to the learning outcomes for the area</b>
<b>Number</b>	<b>Learning outcomes, a student who has successfully completed the course will be able to:</b>		
K_W01	Identify the idea of following health and safety rules and regulations and present sources of hazards in the working environment.	K_W12 K_W17	P6S_WK
K_W02	Present the principles and characteristics of methods of carrying out occupational risk assessment;	K_W05	P6S_WG
K_U03	Analyse the workplace and produce risk assessment documentation.	K_U08	P6S_UW
K_U04	Be able to estimate occupational risk levels for different jobs.	K_U03	P6S_UW
K_U05	Perceive the relationship between the competences of the different actors and environments and the areas of occupational health and safety in particular in the management of occupational risks.	K_U07 K_U14	P6S_UW P6S_UO

<b>Content number</b>	<b>Educational/ curricular content</b>	<b>Reference to learning outcomes for the subject</b>
	<b>Lecture</b>	

T_01	The concept of occupational risk in Polish and international law. Definitions of terms used in risk assessment and objectives of risk assessment.	EK_W01 EK_K05
T_02	Criteria for risk assessment in specific work processes: inductive and deductive methods, quantitative and qualitative methods.	EK_W02
T_03	Methodology of hazard investigation and risk assessment: PHA initial hazard analysis, types of damage and its consequences FMEA, risk calculator, JSA work safety analysis, risk matrix (according to PN-N-18002 standard), RISK SCORE risk index, FIVE STEPS method.	EK_W02 EK_U03
T_04	Assessment of occupational risk on a selected workstation using the PHA preliminary hazard analysis method: description of the assessed workstation, hazard identification and risk estimation according to the PHA method.	EK_W01 EK_W02 EK_U03
T_05	Characteristics of the examined workplace and activities, hazard identification and risk estimation by the method: RISK SCORE,.	EK_W01 EK_W02 EK_U03
T_06	Planning for risk reduction in specific workplaces: reducing or eliminating the impact of identified hazards, reducing the likelihood of injury or deterioration of health.	EK_W01 EK_K05
	<b>EXERCISES</b>	
T_07	The procedure for assessing occupational risk in a company. and use of risk assessment results to improve health and safety conditions.	EK_U03 EK_K05
T_08	Using checklists to analyse risk assessments.	EK_W01 EK_U03
T_09	Assessment of occupational risk at a selected workstation by the method according to the PN-N-18002 standard: description of the examined workstation and requirements concerning the employee, identification of hazards and estimation of risk in a five-grade scale according to the PN-N-18002: 2011 standard, occupational risk assessment card for the examined workstation according to the PN-N-18002: 2011 standard.	EK_W01 EK_W02 EK_U03 EK_K05
T_10	Occupational risk assessment card for the evaluated workplace according to the method: RISK SCORE.	EK_W02 EK_U03
T_11	Occupational risk assessment card for the assessed workplace according to the PHA method.	EK_W02 EK_U03
T_12	Methods of reducing and eliminating occupational risks at selected workplaces.	EK_W01 EK_K05
T_13	Produce risk assessment documentation for a selected workstation.	EK_W02 EK_U03

Methods and forms of teaching	Educational and curricular content
Lecture with multimedia presentation of selected issues	
Conversation lecture	T_04 – T_06
Problem-based lecture	
Informative lecture	T_01 – T_03
Discussion	
Working with text	
Case study method	T_07 – T_09

Problem-based learning	
Didactic/simulation game	
Exercise method	T_10 – T_12
Workshop method	
Project method	T_13
Multimedia presentation	
Audio and/or video demonstrations	
Activation methods (e.g. brainstorming, SWOT analysis technique, decision tree technique, „snowball” method, constructing „mind maps”)	
Inne (jakie?) – ...	
...	

<b>Evaluation criteria in relation to particular learning outcomes</b>				
<b>Learning outcome</b>	<b>For assessment 2</b>	<b>For assessment 3</b>	<b>For assessment 4</b>	<b>For assessment 5</b>
K_W01	The student is not able to indicate regulations and principles of safety and hygiene at work and to present sources of danger in the work environment.	The student is able to indicate regulations and principles of safety and hygiene at work and present sources of danger in the work environment.	The student is not only able to indicate regulations and principles of occupational safety and health and present sources of danger in the work environment for the selected position, but also values of concentrations and intensities acceptable for given factors measurable on the basis of regulations.	The student is not only able to indicate the regulations and rules of occupational safety and health and present the sources of danger in the work environment for the selected position, but also the values of concentrations and intensities allowed for the given factors measurable on the basis of the regulations and the rules of conduct.
K_W02	The student does not know how to characterise the methods of risk assessment.	The student is able to present the characteristics of methods of risk assessment.	The student is not only able to present the characteristics of risk assessment methods, but also how they can be applied in the workplace.	The student is not only able to present the characteristics of risk assessment methods, but also to show how they can be applied in the workplace and to justify the choice of a particular method.
K_U03	The student does not know how to analyse a workplace and how to prepare a risk assessment documentation	The student is able to make a basic analysis of a workstation and to elaborate documentation of risk assessment.	The student is able to analyse a workstation and compile a risk assessment documentation.	The student is able to fully analyse the workplace and compile risk assessment documentation
K_U04	The student is not able to estimate risk levels for different workplaces	The student is able to estimate occupational risk levels for different workplaces.	The student is not only able to estimate risk levels for different jobs, but also to interpret the results.	The student is not only able to estimate risk levels for different jobs, but also to interpret the results and take action to reduce the risk level.
K_U05	The student does not perceive the relationship between the competences of the different actors and environments and the areas of occupational safety and health in particular in the field of occupational risk management	The student has a basic perception of the relationship between the competences of different actors and environments and the areas of occupational safety and health, in particular in the field of occupational risk management	The student duly perceives the relationship between the competences of the different actors and environments and the areas of occupational health and safety in particular in terms of occupational risk management	The student fully perceives the relationship between the competences of the different actors and environments and the areas of occupational safety and health, in particular occupational risk management

Verification of learning outcomes	EK symbols for the module/subject				
	W01	W02	U03	U04	U05
Written examination					
Oral examination					
Written credit	X	X	X	X	X
Oral credit					
Written colloquium	X	X	X	X	X
Oral colloquium					
Test					
Project	X	X	X	X	X
Written work					
Report					
Multimedia presentation					
Work during exercise	X	X	X	X	X
Other (which?) -					

Hourly teaching load and student workload	Full-time studies	Part-time studies
1. Lectures (joint participation of academics and students)	10	8
2. Other forms (joint participation of academic staff and students)	20	10
3. Consultation with the teacher	-	-
<b>Total 1+2+3</b>	<b>30</b>	<b>18</b>
4. Internships (carried out by students on their own)	—	—
5. Student's own work (including homework and project work, preparation for a credit/exam)	20	32
<b>Total 4+5</b>	<b>20</b>	<b>32</b>
<b>SUMMARY 1+2+3+4+5</b>	<b>50</b>	<b>50</b>
<b>Total ECTS credits according to the study plan</b>	<b>2</b>	

<b>Reference literature</b>	1. Romanowska-Słomka, <i>Ocena ryzyka zawodowego</i> , Kraków-Tarnobrzeg, 2009, Tarbonus 2. Zawieski W., <i>Ryzyko zawodowe. Metodyczne podstawy oceny</i> , Warszawa, 2009, CIOP 3. Systemy zarządzania bezpieczeństwem i higieną pracy. Ogólne wytyczne do oceny ryzyka zawodowego, Warszawa, 2011, PN-N-18002:2011
<b>Complementary literature</b>	1. Myrcha K., Wrobel J., Gierasimiuk J., <i>Zagrożenia czynnikami niebezpiecznymi i szkodliwymi w środowisku pracy</i> , Warszawa 2000, CIOP.

	2. Rączkowski, <i>BHP w praktyce</i> , Gdańsk, 2012, Ośrodek Doradztwa i Doskonalenia Kadr.
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