

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Management of arduous work and work safety		Code 1011102331011125150
Field of study Engineering Management - Full-time studies -	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Quality Systems and Ergonomics	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: 15 Laboratory: - Project/seminars: -		No. of credits 4
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 4 100%
Responsible for subject / lecturer: dr inż. Adam Górny email: adam.gorny@put.poznan.pl tel. 616653407 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Basic information on safety management systems according to standards OHSAS-18001 and series PN-N-18000. Knowledge of methods of occupational risk assessment.
2	Skills	Ability to analyze the working environment.
3	Social competencies	Awareness of health and safety at work
Assumptions and objectives of the course: The aim of the course is to familiarize students with the basic safety and health management systems at work.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has knowledge of the subject regarding contextual sciences in relation to the management sciences, ergological sciences, the applied research methods as well as common and specific conceptual apparatus in relation to management sciences - [K2A_W01]		
2. Can use the theoretical knowledge to describe and analyse the causes and processes social phenomena (cultural, political, legal, economic) as well as can formulate their own opinions and choose critical data and methods of analysis - [K2A_W06]		
Skills:		
1. Is able to correctly interpret and explain the phenomenon of cultural, social, political, legal, economic), and mutual relationships between social phenomena - [K2A_U01]		
2. Can use the theoretical knowledge to describe and analyze the causes, the course of processes and social phenomena (cultural, political, legal, economic), as well is able to formulate his own opinions, select critical data or methods of analysis - [K2A_U02]		
3. Is able to predict, model some complex social processes that involve phenomena from different areas of social life (cultural, political, legal, economic) using advanced methods and tools in the field of economic sciences and a discipline of management sciences - [K2A_U04]		
4. Has the ability to use knowledge gained in different areas and forms, extended by a critical review of the effectiveness and suitability of the applied knowledge - [K2A_U06]		
Social competencies:		

1. Can contribute to a factual input in the preparation of the social projects and manage the ventures resulting from these projects - [K2A_K05]
2. Is aware of the interdisciplinary character of knowledge and skills that are needed to solve complex problems of an organization and a necessity to create interdisciplinary teams - [K2A_K06]

Assessment methods of study outcomes

Formative assessment:

Classes: on the basis of a report in a class,

Lectures: on the basis of information check from previous lectures

Collective assessment:

Classes: average of the grades achieved report preparation

Lectures: written test, in which at least one answer in correct (scored 0,1) or written answers to open questions (scored 0-3);. Credits will be given after achieving at least 31% of points.

Course description

The nature and objectives of safety management system and health of workers in enterprises. Characteristics of the basic models of safety management systems and health at work. Costs of occupational safety. Methods for assessing the functioning of the occupational safety management. Methods risk assessment in occupational safety management systems. Computer tools to help manage occupational safety.

Basic bibliography:

1. Karczewski J.T. System zarządzania bezpieczeństwem pracy (Occupational safety management system) Wyd. ODDK Gdańsk 2000
2. OHSAS 18002:2000 Systemy zarządzania bezpieczeństwem i higieną pracy (Occupational health and safety management systems). Wytyczne do wdrożenia
3. OHSAS 18001:2007 Systemy zarządzania bezpieczeństwem i higieną pracy (Occupational health and safety management systems). Specyfikacja
4. Pietrzak L. Zarządzanie bezpieczeństwem pracy i ryzykiem (Occupational safety and risk management system) Wyd. CIOP Warszawa 2001
5. Karczewski J.T. (red), Zarządzanie bezpieczeństwem pracy. Ocena ryzyka zawodowego (Occupational safety management system. Occupational risk assessment) WEKA - Forum Sp. z o.o. Warszawa 2002-2008

Additional bibliography:

1. BS 8800: 1996 Guide to Occupational Health and Safety Management Systems, BSI, Lon-don, UK
2. PN-N-18001 Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania (Occupational health and safety management systems. Requirements)
3. PN-N-18002 Systemy zarządzania bezpieczeństwem i higieną pracy. Ogólne wytyczne oceny ryzyka zawodowego (Occupational health and safety management systems. General rules for occupational risk assessment)
4. PN-N-18004 Systemy zarządzania bezpieczeństwem i higieną pracy. Wytyczne wdrażania (Occupational health and safety management systems. Implementation guidelines).

Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	30
2. Participation in classes	15
3. Preparation for classes	22
4. Consultations with a supervisor	15
5. Preparation for the final exam	23
6. Exam	5

Student's workload		
Source of workload	hours	ECTS
Total workload	100	4
Contact hours	65	3
Practical activities	15	1