

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Economic problems of work safety		Code 1011101261011134358
Field of study Safety Engineering - Full-time studies - First-	Profile of study (general academic, practical) (brak)	Year /Semester 3 / 6
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 15 Classes: 30 Laboratory: - Project/seminars: 30		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. Rafał Mierzwiaak email: rafal.mierzwiaak@put.poznan.pl tel. 61 6653437 Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		Responsible for subject / lecturer: dr inż. Rafał Mierzwiaak email: rafal.mierzwiaak@put.poznan.pl tel. 61 665 34 05 Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has knowledge concerning economic conditionings of business operations.
2	Skills	Student can interpret and describe basic rules and economic processes having an influence on business activity. Student can interpret and describe basic requirements in the scope of occupational safety in companies.
3	Social competencies	Student is aware of a social context of a business activity in the scope of safety and health, and understands the need for optimising the economic issues of occupational health and safety.
Assumptions and objectives of the course: The purpose of the subject is to acquire knowledge, skills and competences in the scope of terms, issues, regularities, and methods of solving occupational safety and health problems in the context of their economic implications.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Student has knowledge concerning occupational safety and health costs in companies - [K1A_W28] 2. Student knows basic terminology connected with economic aspects of occupational safety - [K1A_W31] 3. Student knows and understands basic activities, methods and tools connected with occupational safety and health (OSH) costs calculation - [K1A_W28] 4. Student has knowledge within occupational safety economics - [K1A_W28]		
Skills:		
1. Student can describe and analyse economic and social phenomena concerning occupational safety - [K1A_U12] 2. Student can use economic methods and tools to solve occupational safety problems - [K1A_U12] 3. Student will be able to take up decisions concerning solutions in the scope of OSH on the basis of economic analysis - [K1A_U12] 4. Student can formulate and analyse the issues concerning occupational safety costs in business management - [K1A_U12]		
Social competencies:		

1. Student is aware of the need for continuous self-education in the scope of a pro-active approach to occupational safety with a particular consideration of economic issues in this area - [K1A_K01]
2. Student is aware of the costs significance in occupational safety - [K1A_K02]
3. Student is aware of the significance of an active participation in enterprises? economic analysis which improve the state of working conditions - [K1A_K02]
4. Student is aware of ethical problems? significance in economisation of actions within the scope of occupational safety - [K1A_K05]

Assessment methods of study outcomes

Ongoing appraisal

- a) within the scope of project works: spoken responses, which purpose is justifying an accepted solution for a semester project's element
- b) within the scope of seminars: on the basis of written or spoken assessment of tasks performed during the classes
- c) within the scope of lectures: on the basis of written or spoken assessment concerning current material or the material discussed during last classes

Summative assessment

- a) within the scope of project works: on the basis of a written report from performed project works
- b) within the scope of seminars: on the basis of grade point average from written and spoken tests (scale from 2 to 5 ? F to A)
- c) within the scope of lectures: on the basis of written test containing 5 descriptive questions. Each question is scored from 1 to 5 (F to A). A positive grade is achieved when a student gets at least 50% points possible to achieve.

Course description

1. Occupational safety as an element of management.
2. Economic conditionings of decisions (a producer's and employee's decisions) taken in the scope of occupational safety.
3. Types of benefits and costs in occupational safety.
4. Methods used for evaluating benefits and costs when ensuring occupational safety which include methods for evaluating economic results of occupational accidents and diseases, and presence of risk for human and environment safety.
5. Decision optimisation in the scope of ensuring occupational safety.
6. Economic instruments of ensuring occupational safety.

Basic bibliography:

1. Ekonomiczne aspekty ochrony pracy, w: Koradecka D. (red.), Bezpieczeństwo pracy i ergonomia, Rzepecki J., CIOP, Warszawa, 1999
2. Rzepecki J., Ekonomiczne aspekty kształtowania warunków pracy. Bezpieczeństwo Pracy 12/2007.
3. Sierpińska M., Jachna T., Ocena przedsiębiorstw według standardów światowych, PWN 2004.

Additional bibliography:

1. Podstawy prowadzenia analizy kosztów i korzyści bhp, Rzepecki J., CIOP, Warszawa, 2006
2. BHP w Przedsiębiorstwie. Model analizy korzyści i kosztów ochrony pracy, Rzepecki J., Bezpieczeństwo pracy 2(2002), Warszawa, 2002
3. Kowal E., Ekonomiczne aspekty ergonomii. PWN, Warszawa-Poznań 2002.
4. Writings on the subject quoted during discussions held on Web pages Economic problems of work safety (<http://fedcba.ning.com/xn/detail/2516803:Comment:114483>).

Result of average student's workload

Activity	Time (working hours)	
1. Participation in lectures	15	
2. Participation in seminars	30	
3. Participation in project works	30	
4. Preparation to project works	6	
5. Preparation to seminars	3	
6. Preparation to lecture's assessment.	6	
Student's workload		
Source of workload	hours	ECTS
Total workload	90	4
Contact hours	75	0

Practical activities	60	0
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