



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economics in work safety

### Course

Field of study

Safety Engineering

Area of study (specialization)

Security and Crisis Management

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

elective

### Number of hours

Lecture

15

Laboratory classes

Other (e.g. online)

Tutorials

15

Projects/seminars

15

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

Ph.D., Eng. , Rafał Mierzwiak,

Responsible for the course/lecturer:

Mail to : rafal.mierzwiak@put.poznan.pl

Phone : 691504270

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań

### Prerequisites

Basic knowledge of economics

Knowledge of the basics of OSH

### Course objective

The aim of the course is to acquire knowledge, skills and competences in the field of concepts, issues, correctness and methods of solving occupational safety and health problems in the context of their economic implications

### Course-related learning outcomes

Knowledge



The student has basic economic knowledge in the context of occupational health and safety [P7S\_WG\_03; P7S\_WG\_04 ]

The student knows and understands the basic methodological instruments for modelling and decision making in the context of OSH [P7S\_WG\_03; P7S\_WG\_04]

#### Skills

The student is able to describe and analyse economic and social phenomena concerning work safety [P7S\_UW\_02; P7S\_UW\_03; P7S\_UW\_06].

The student is able to apply methods of data analysis in the context of economic problems in occupational safety and health [P7S\_UW\_02; P7S\_UW\_03; P7S\_UW\_06]

#### Social competences

The student is aware of the importance of cost accounting in occupational safety [P7S\_KK\_01; P7S\_KK\_03; P7S\_KO\_01; P7S\_KR\_02]

The student is aware of the importance of ethical problems in the economization of work safety activities [P7S\_KK\_01; P7S\_KK\_03; P7S\_KO\_01; P7S\_KR\_02]

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Moodle quiz

Evaluation of mini-projects

#### Programme content

1. Economic doctrines and their importance for state and business policy-making in the field of occupational health and safety
2. Occupational safety as part of the management process - introduction to the issue
3. Economic instruments to ensure job safety in microeconomic and macro-economic terms
4. Types of benefits and costs of work safety - analysis of selected cost-benefit models
5. The methods for assessing the benefits and costs of ensuring safety at work, including methods for assessing the economic impact of accidents at work
6. Economic determinants of decisions taken in the field of occupational safety by the organization's stakeholders - elements of strategic analysis
7. Optimisation of occupational safety decisions - advanced decision-making and evaluation models

#### Teaching methods

Group projects and e-learning with the Moodle platform



## Bibliography

### Basic

1. Teaching materials for the classes on the Moodle platform
2. <https://ohsonline.com/articles/2018/10/01/the-economics-of-workplace-safety.aspx>

### Additional

1. Podstawy ekonomiki przedsiębiorstwa, Duraj J., PWE, Warszawa, 2000
2. Ekonomiczne aspekty ochrony pracy, w: Koradecka D. ( red.), Bezpieczeństwo pracy i ergonomia, Rzepecki J., CIOP, Warszawa, 1999
3. BHP w Przedsiębiorstwie. Model analizy korzyści i kosztów ochrony pracy, Rzepecki J., Bezpieczeństwo pracy 2(2002), Warszawa, 2002
4. Podstawy prowadzenia analizy kosztów i korzyści bhp, Rzepecki J., CIOP, Warszawa, 2006

## Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for project activities, project execution, analysis of materials published on Moodle, consultations) <sup>1</sup>	55	2,0

<sup>1</sup> delete or add other activities as appropriate