



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Economics of safety

Course

Field of study

Safety Engineering

Area of study (specialization)

Ergonomics and work safety

Level of study

Second-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

8

Laboratory classes

0

Other (e.g. online)

0

Tutorials

10

Projects/seminars

10

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

Rafał Mierzwiak, Ph.D., Eng.

e-mail: rafal.mierzwiak@put.poznan.pl

phon: 691504270

Responsible for the course/lecturer:

Prerequisites

The student has basic knowledge of economics and taking actions to improve health and safety at work.

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

- knows the basic concepts of economics in the context of the requirements of work safety and ergonomics,

- is familiar with the issues of costs and insurance systems, occurring in the area of ergonomics and safety at work and the related legal regulations,



- knows and understands the basic methodological instruments for modelling and decision making in the context of OHS,

Skills

- is able to describe and analyse economic and social phenomena taking place, especially in connection with work safety,

- is able to apply modern methods of data analysis in the context of economic problems occurring during the process of shaping work safety,

- is able to make a critical analysis of how the organization operates and assess, taking into account economic aspects, the existing technical solutions, in particular machines, devices, objects, systems and processes,

- is able to plan and manage business ventures undertaken in the area of work safety,

Social competences

- is aware of the understanding of non-technical aspects and effects of the engineering activity, including its impact on the environment and the related responsibility for the decisions taken,

- is aware of the importance of cost accounting for effective work safety,

- is aware of the importance of ethical problems in the economization of park security activities,

- is aware of the responsibility for their own work and willingness to comply with the applicable rules of teamwork and take responsibility for jointly performed tasks.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Moodle quiz,

Evaluation of mini-projects,

Evaluation of tasks in the tutorials.

Programme content

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

Teaching methods

Group projects and e-learning with the Moodle platform and tasks in the tutorials.



Bibliography

Basic

1. Rzepecki J. (1999), Ekonomiczne aspekty ochrony pracy, w: Koradecka D. (red.), Bezpieczeństwo pracy i ergonomia, CIOP, Warszawa.
2. Rzepecki J., (2002), BHP w Przedsiębiorstwie. Model analizy korzyści i kosztów ochrony pracy, Bezpieczeństwo pracy, 10 (6-18).
3. Rzepecki J. (2006), Podstawy prowadzenia analizy kosztów i korzyści bhp, Wydawnictwo CIOP, Warszawa.

Additional

1. Duraj J. (2000), Podstawy ekonomiki przedsiębiorstwa, PWE, Warszawa.
2. Mossink, J. C. M. (2002). Understanding and performing economic assessments at the company level. Protection Workers Health, Series No 2, WHO, Geneva.
3. Materiały do zajęć umieszczone na platformie Moodle.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	28	2,0
Student's own work (literature studies, preparation for project activities, project execution, analysis of materials published on Moodle, consultations) ¹	72	2,0

¹ delete or add other activities as appropriate