



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Financial transact safety

Course

Field of study

Safety Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

3/6

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., D.Sc., Joanna Sadłowska-Wrzesińska,
University Professor

Responsible for the course/lecturer:

Mail to: joanna.sadlowska-
wrzesinska@put.poznan.pl

Faculty of Engineering Management

ul. J. Rychlewskiego 2, 60-965 Poznań,

Prerequisites

The student has knowledge of occupational hazard factors; knows how to identify and assess hazards in the work environment, as well as to assess the risks. The student is aware of the costs arising from the wrong level of health and safety.

Course objective

Acquiring knowledge about safety management in order to reduce losses and familiarizing the student with the main groups of costs of occupational safety; in addition - recognition of the effectiveness of the incentive effect of the system of differentiated premiums for social accident insurance. At the practical level - acquiring skills of economic analyzes of occupational health and safety, including identification as well as recording and monitoring costs for the purposes of planning corrective actions.



Course-related learning outcomes

Knowledge

- Student knows issues in the field of work safety, security systems, threats and their consequences in the context of incurred losses [P6S_WG_02].
- The student knows the issues in the field of threats and their effects: economic, moral and image in relation to the costs of occupational safety [P6S_WG_03].
- The student knows the issues of ergonomics, human ecology, environmental protection and occupational health and safety and understands their interrelationship in the processes of ensuring psychophysical well-being of employees in connection with the economics of enterprises [P6S_WG_05].

Skills

- Student is able to present, using properly selected means, the problem associated with the need for systematic monitoring and reduction of losses in occupational safety [P6S_UK_01].
- Student is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and based on them determine the needs of preventive actions, taking into account the economic capabilities of the company [P6S_UU_01].
- Student is able to plan and conduct tests (including measurements and simulations) of work safety costs and design appropriate corrective actions to minimize losses [P6S_UO_01].

Social competences

- The student is aware of the recognition of the importance of knowledge in the field of safety management and shaping the appropriate security policy in solving problems in the field of safety engineering in the work environment [P6S_KK_02].
- The student is aware of the responsibility for their own work and readiness to comply with the principles of teamwork and taking responsibility for jointly implemented tasks in the work to improve the level of security and reduce losses in this regard [P6S_KR_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

Lecture:

- knowledge is verified by short tests after the third and fifth didactic unit - single-choice test consisting of several questions (new concepts and definitions) + written problem tasks; 1st and 2nd attempt credit threshold - 50% + 1;

Exercises:

- single choice test after the third unit; average of partial grades for individual tasks; 1st and 2nd attempt credit threshold - 50% + 1;



Project:

- average of partial grades for the implementation of individual phases of the project + grade for the editing level of the project and progress during the course; 1st and 2nd attempt credit threshold - 50% + 1;

Programme content

Lecture:

1. Labor costs. Loss as an undesirable component of labor costs. 2. Problems of safety and employee welfare in terms of costs and losses. 3. Accidents at work, occupational diseases, catastrophes. Distribution of costs. Social costs as a specific type of loss. 4. Reducing losses in work safety. Reduction of internal and external losses. Actions aimed at building a safety culture.

Exercises: 1. Identification of risk factors. Costs related to inadequate working environment conditions. 2. Outlays of the enterprise making losses. Moral, image and cultural issues. Costs of preventive measures.

Project: Students design security costs in a selected enterprise.

Teaching methods

Lecture:

- information lecture, seminar lecture, multimedia presentation.

Exercises:

- exposing methods (multimedia presentation, film), panel discussion, case study, brainstorming, practical exercises.

Project:

- multimedia presentation, case study.

Bibliography

Basic

1. Sadłowska-Wrzesińska J., Lewicki L, (red.) Podstawy bezpieczeństwa i zdrowia w pracy, Wydawnictwo WSL, Poznań, 2018.
2. Romanowska-Słomka I., Wypadki i choroby zawodowe. Analiza i koszty, Tarbonus, 2018.
3. Pietrzak L., Badanie wypadków przy pracy. Modele i metody, CIOP, Warszawa, 2004.
4. Polskie Normy i Rozporządzenia, w tym PN-ISO 45001:2018.



Additional

1.Smoliński D. , Solecki L., Ekonomiczne przesłanki ograniczania ryzyka zawodowego, Bezpieczeństwo Pracy: nauka i praktyka, Warszawa, 2015, nr 6, s. 25-27.

2.Czernecka W., Górny A., Ergonomic risk measurement in prioritizing corrective action at workstations, [in:] Occupational Safety and Hygiene VI: Proceedings of the 6th International Symposium on Occupation Safety and Hygiene, Guimarães, Portugal (p. 419), CRC Press, March 2018.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	45	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) ¹	55	2,5

¹ delete or add other activities as appropriate