



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Examination of occupational accidents and diseases

### Course

Field of study

Year/Semester

Safety engineering

3/6

Area of study (specialization)

Profile of study

general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

part-time

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

10

0

0

Tutorials

Projects/seminars

10

10

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

dr hab. Joanna Sadłowska-Wrzesińska

Responsible for the course/lecturer:

mgr inż. Wiktoria Czernecka

Institute of Safety Engineering

email: w\_czernecka@wp.pl

Risk and Quality Management Department

email: joanna.sadlowska-

wrzesinska@put.poznan.pl

### 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 relationship between the risk of hazards and accident.

### Course objective

Acquiring knowledge about accidents at work and occupational diseases occurring in Polish workplaces. At the practical level, the goal is to acquire skills in using properly selected methods to determine the causes of accidents in the work environment in order to carry out preventive actions; in addition, the ability to prepare documentation related to accidents at work and to apply procedures for reporting and determining the causes of occupational diseases.



### Course-related learning outcomes

#### Knowledge

- Student knows the concepts for the investigation of occupational accidents and diseases and their historical development [P6S\_WG\_02]
- The student knows the phenomena characteristic of the study of accidents and occupational diseases and advanced relationships between the level of safety and accidents [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

- The student is able to present, using properly selected means, the problem of the risk of burns at work and occupational diseases, embedding it in the theoretical assumptions of safety engineering and propose solutions at least at the organizational level P6S\_UK\_01
- Student is able to identify changes in requirements, standards, regulations, technical progress and reality of the labor market, and based on them determine the needs of preventive actions to reduce the occurrence of accidents at work and occupational diseases P6S\_UU\_01

I propose to add the following effect:

- Student is able to plan and conduct research (including measurements and simulations) in relation to the causes and circumstances of accidents at work, interpret the results obtained, draw conclusions and propose ways to reduce the risk of accidents and potentially accident events P6S\_UO\_01

#### Social competences

1. The student is aware of the recognition of the importance of knowledge in solving problems in the field of accident and occupational disease research, and continuous improvement in this area P6S\_KK\_02
2. The student is aware of the responsibility for 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 safety and reduce occupational accidents and diseases P6S\_KR\_02

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

- knowledge is verified by short tests after the third and fifth didactic unit - new concepts and definitions + problem tasks; in the process of project preparation - assessment of individual stages of project development, the aim of which is to prepare full accident documentation;



- social skills and competences are verified by issuing partial grades resulting from: working in teams (taking responsibility for decisions made); rewarding activity; presentations of exercises prepared by students.

Summative rating:

knowledge is verified by a written test on the basic concepts and problems of researching occupational accidents and diseases; passing threshold - 50% + 1;

exercises - average of partial grades;

project - average of partial grades + grade for the editing level of the project.

### Programme content

1. Identification of risk factors and mitigation measures in the work environment. 2. Accidents at work, accidents equated to accidents at work. Accidents on the way to / from work. 3. Costs of accidents at work. 4. Methods of investigating accidents in the work environment. Determining the causes of accidents. Accident team, legal classification of an accident. 5. Post-accident documentation. 6. Occupational diseases. Development history, distribution, causes. 7. Procedure for reporting suspected occupational disease. Documentation - its scope and storage.

### Teaching methods

lecture

- informative lecture, conversational lecture.

exercises

- displaying methods (film, show), panel discussion, case study, brainstorming.

### Bibliography

Basic

1. Sadłowska-Wrzesińska J., Lewicki L, (red.) Podstawy bezpieczeństwa i Zdrowia w pracy, Wyd. WSL, Poznań 2018.

2. Sadłowska-Wrzesińska J., Lewicki L, Wypadki przy pracy i choroby zawodowe, [w]: Istotne aspekty BHP, Lewicki L., Sadłowska-Wrzesińska J., Wyd. WSL, Poznań 2014.

3. Pietrzak L., Badanie wypadków przy pracy. Modele i metody, CIOP, Warszawa, 2004.

4. Polskie Normy i rozporządzenia, w tym Rozporządzenie Rady Ministrów z dnia 1 lipca 2009 r. w sprawie ustalania okoliczności i przyczyn wypadków przy pracy.

Additional

1. Nowakowski M., Zieja M., Ewertowski T., Żyłuk A., Study of the participation of the human factor



using the developed model of aviation causes taxonomy, access: file: /// C:

/Users/WEZ1/Downloads/59\_76\_A\_BiE\_NOWAKOWSKI\_ZIEJA\_EWERTOWSKI\_ZYLUK.pdf

2. Czernecka W. & Górný, A. (2018, March). 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 (SHO 2018), March 26-27, 2018, Guimarães, Portugal (p. 419). CRC Press.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	80	4,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	50	2,5

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