



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Occupational risk management

### Course

Field of study

Safety Engineering

Area of study (specialization)

Integrated Management of Safety in Organization

Level of study

Second-cycle studies

Form of study

part-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

10

Laboratory classes

0

Other (e.g. online)

0

Tutorials

10

Projects/seminars

0

### Number of credit points

3

### Lecturers

Responsible for the course/lecturer:

Adam Górny, Ph.D., Eng.

e-mail: adam.gorny@put.poznan.pl

Responsible for the course/lecturer:

Faculty of Engineering Management

Institute of Safety and Quality Engineering

ul. J. Rychlewskiego 2, pok. 357, 60-965 Poznań

### Prerequisites

The student has a basic knowledge about the methodology of occupational risk assessment and the management process. The student is able to assess the occupational risk in the workplace. The student is aware of the role and importance of occupational risk assessment to ensure effective shaping of occupational safety.

### Course objective

Strengthening knowledge of occupational risk assessment and familiarizing students with the basic issues related to the process of occupational risk management. Indication of the role of occupational risk management in ensuring the effectiveness of systemic occupational safety management.

### Course-related learning outcomes

Knowledge



- knows issues in the field of risk analysis, risk assessment and their effects in the work environment, in particular related to the area of ergonomics and work safety,

#### Skills

- is able to properly select the sources and information derived from them, perform assessments and critical analyzes and synthesis of obtained information, on this basis formulate conclusions and comprehensively justify the adopted solutions,
- is able to identify changes in requirements, standards, regulations in order to adapt them to technical progress and the reality of the labor market and based on them determine the needs for supplementing information,
- is able to use research, analytical, simulation and experimental methods to formulate and solve engineering tasks,
- is able to implement various techniques to enable effective communication in a professional environment,
- is able to prepare the necessary resources required to provide opportunities to work in an industrial environment and knows the safety principles associated with this work and is able to force their application in practice,

#### Social competences

- is aware of the cause-and-effect relationships that are important when achieving the set goals and ranking the importance of alternative solutions,
- is aware of the importance of knowledge in ensuring the effectiveness of solving problems in the field of safety engineering and is aware of the need for continuous improvement,
- is aware of the responsibility for his own work and is ready to comply with the accepted principles of team work and to bear responsibility for jointly performed tasks.

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

Learning outcomes presented above are verified as follows:

##### Formative assessment:

- in the scope of tutorials: on the basis of reports on independently performed tasks,
- in the scope of lectures classes: based on oral and written answers to questions covering issues discussed in the current and previous lectures.

##### Summative rating:

- in the scope of tutorials: average grade of partial grades for submitted reports, colloquium to check knowledge,
- in the scope of lecture classes: exam in the form of a test (written work) in which at least one answer is correct (the answer is scored as 0 or 1), or written answers to open questions (answers are scored on a scale of 0 to 3); student get a positive result of exam after obtaining at least 51% of the points available.



## Programme content

The idea of the occupational risk management process. Occupational risk (in the management function). Improvement activities in occupational risk management. Implementation of safety goals. Implementation of improvement actions. Risk management in technology. Levels of excellence in the scope of implemented improvement tasks.

## Teaching methods

Lecture classes are conducted in the form of an informational lecture supported by a multimedia presentation.

Tutorials are conducted using the case method, based on solving practical examples (tasks).

## Bibliography

### Basic

1. Górny A. (2011), Zarządzanie ryzykiem zawodowym, Wydawnictwo Politechniki Poznańskiej, Poznań.
2. Kaczmarek T. T. (2010), Zarządzanie ryzykiem. Ujęcie interdyscyplinarne, Wydawnictwo Difin, Warszawa.
3. Pietrzak L. (2001), Zarządzanie bezpieczeństwem pracy i ryzykiem, Centralny Instytut Ochrony Pracy, Warszawa.

### Additional

1. Smoliński D. (1999), Ocena ryzyka zawodowego, Wyd. ODDK, Gdańsk.
2. Koradecka D. (red.) (1997), Bezpieczeństwo pracy i ergonomia, t. I i II, Centralny Instytut Ochrony Pracy, Warszawa.
3. PN-ISO 31000:2018-08, Zarządzanie ryzykiem. Wytyczne.
4. PN-EN 31010:2010, Zarządzanie ryzykiem. Techniki oceny ryzyka.
5. PKN-ISO Guide 73:2012, Zarządzanie ryzykiem. Terminologia.

## Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	20	1,5
Student's own work (iterature studies, preparation for exercises, preparation of reports on individual work, preparation for colloquium) <sup>1</sup>	55	1,5

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