



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Monitoring performance in occupational health and safety management systems

### Course

Field of study

Safety Engineering

Area of study (specialization)

Integrated Management of Safety in the Organization

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

2/3

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

3

### Lecturers

Responsible for the course/lecturer:

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Responsible for the course/lecturer:

Faculty of Engineering Management

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### Prerequisites

The student should have basic knowledge in the field of risk management, as well as systemic ensuring work safety, be able to interpret basic concepts and rules related to safety, and be aware of the importance of managing occupational health and safety.

### Course objective

Developing understanding of theoretical aspects and practical skills in process performance safety monitoring and safety systems

### Course-related learning outcomes

#### Knowledge

1. A student knows issues of work safety and system management in this area [P7S\_WG\_02],
2. A student knows the issues of risk analysis, threats and their effects in the work environment [P7S\_WG\_05],
3. The student knows the basic methods and techniques of process performance safety monitoring, also with the use of information technology, information protection and computer support [P7S\_WK\_02; P7S\_WK\_03; P7S\_WK\_04].

#### Skills

1. A student is able to properly select sources and information from them for the purpose of processes performance monitoring in order to assess, critically analyze and synthesize this information, formulate conclusions and comprehensively justify the opinion [P7S\_UW\_01],
2. A student is able to apply various monitoring techniques to communicate in a professional environment and in other environments [P7S\_UW\_02],
3. A student is able to recognize system and non-technical aspects as well as socio-technical, organizational and economic aspects during the process safety performance monitoring [P7S\_UW\_03],
4. A student is able to present by means of properly selected means the scope of the process performance monitoring [P7S\_UK\_01],
5. A student is able to identify changes in requirements, standards, regulations and technical progress that are the basis for OHS management systems, and based on them determine the needs to supplement own and other knowledge [P7S\_UU\_01],

#### Social competences

1. A student is aware of recognition of cause and effect relationships in process safety performance monitoring and ranking the significance of alternative or competitive tasks [P7S\_KK\_01],
2. A student is aware of recognition of the importance of knowledge in solving problems process performance monitoring and continuous improvement [P7S\_KK\_02],



3. A student is aware of responsibility for own work and readiness to comply with the principles of teamwork and taking responsibility for jointly implemented monitoring tasks [P7S\_KR\_02].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

- a) tutorials: current assessment of the tasks assigned,
- b) projects: ongoing assessment of the progress of work on the selected project,
- c) lectures: discussion on lectures.

Summative rating:

- a) tutorials: average of partial tasks; credit after passing at least 50% of the point,
- b) projects: assessment of the submitted solution of the selected project; credit after passing at least 3.0,
- c) lectures: pass a test questions, scored on a two-point scale of 0, 1. Passing threshold: 50% of the points.

### Programme content

Lecture: Strategy, priorities and plans for monitoring the processes performance . Principles of determining the indicators and their role in the process of monitoring the performance of activities. Principles of collecting and analyzing data and information.

Tutorials: Requirements for the maintenance of documented information for process performance monitoring. Preparation of a list of indicators for a sample case study. Documenting the results of process monitoring.

Project: The procedure of monitoring the performance of the selected process with the necessary forms of documented information for the enterprise.

### Teaching methods

Lecture: information and conversation lecture based on multimedia presentation.

Tutorials: performing the tasks given by the lecturer

The project classes: project method with reference to the real example.

### Bibliography

Basic

1. PN-ISO 45001 Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania i wytyczne stosowania. PKN, Warszawa 2018.
2. Jasiulewicz-Kaczmarek M., Misztal A. (2014), Projektowanie i integracja systemów zarządzania projakościowego, Wydawnictwo Politechniki Poznańskiej, Poznań.
3. Smoliński D.R., Solecki L. (2015), Mierniki stanu bezpieczeństwa i higieny pracy na stanowiskach pracy



Medycyna Ogólna i Nauki o Zdrowiu, 2015, Tom 21, Nr 2 <http://www.monz.pl/Mierniki-stanu-bezpieczenstwa-i-higieny-pracy-na-stanowiskach-pracy,73580,0,2.html>

4. Markowski Adam S., Bezpieczeństwo procesów przemysłowych, 2017, Wydawnictwo Politechniki Łódzkiej

#### Additional

1. Pawłowska Z., Podgórski D. (red.) (2004), Podstawy systemowego zarządzania bhp, CIOP, Warszawa.
2. Jasiulewicz-Kaczmarek M., Antosz K., Żywica P., Mazurkiewicz D., Bo Sun, Yi Ren Framework of machine criticality assessment with criteria interactions, Eksploatacja i Niezawodność – Maintenance and Reliability - 2021, vol. 23, no. 3, s. 207-220

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for classes, data collection, project preparation, preparation for tests) <sup>1</sup>	30	1,0

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