



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Basics of safety management [N11BiJ1>PZB]

Course

Field of study

Safety and Quality Engineering

Year/Semester

1/2

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

part-time

Requirements

compulsory

Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

9

Projects/seminars

0

Number of credit points

2,00

Coordinators

dr inż. Tomasz Ewertowski

tomasz.ewertowski@put.poznan.pl

Lecturers

Prerequisites

The student has a basic knowledge of safety and management issues. The student has the ability to obtain information from the indicated sources and is ready to actively seek, systematize and present knowledge in the field of safety management.

Course objective

Transfer and systematization of basic theoretical knowledge related to safety management. Presentation of legal conditions for traditional and systemic safety management. Developing the ability to solve problems occurring during safety management.

Course-related learning outcomes

Knowledge:

1. Defines the concept of safety management and the differences between traditional and systemic approaches to safety [K1_W02].
2. Explains the legal and organizational foundations of safety management systems, including the genesis and concept of systemic safety management [K1_W03].
3. Describes the requirements and guidelines for safety management systems, in the context of their

design and implementation [K1_W08].

Skills:

1. Analyzes and interprets systemic, socio-technical, organizational, and economic aspects of engineering tasks related to safety management [K1_U03].
2. Prepares the necessary means to ensure safety in an industrial environment, implementing safety principles and promoting their application in practice [K1_U05].
3. Conducts critical analysis and optimization of safety management systems to increase the quality and safety of work [K1_U06].

Social competences:

1. Develops awareness of the importance of knowledge in the field of safety management and continuous improvement in this area [K1_K02].
2. Demonstrates professionalism and ethical conduct in promoting a culture of safety and quality, with respect for diversity [K1_K06].
3. Shows awareness of responsibility for one's own work and readiness to work in a team, taking responsibility for tasks jointly undertaken in the field of safety [K1_K07].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

tutorials: ongoing assessment (on a scale of 2 to 5) of the implemented tasks. Credit after passing at least 3.0. 1st and 2nd approach passing: 56% of the points available.

Summary assessment:

tutorials: average of grades for partial tasks; Credit after passing at least 3.0. 1st and 2nd approach passing: 56% of the points available.

Programme content

The program covers the characteristics of traditional and systemic safety management, including: organizational and legal basis as well as requirements and guidelines.

Course topics

Tutorials:

Definition of safety management. Traditional and systemic approach to domain subject safety. Legal and organizational basis of safety management systems. The genesis and concept of systemic safety management. Requirements and guidelines for safety management systems. Design and implementation of safety management systems. Improving the safety management system.

Teaching methods

Tutorials:

- multimedia presentation, case study. The class uses the classic problem method, as well as the method of cases and exercises.

Bibliography

Basic:

1. Pacana A., (2020), Systemy zarządzania bezpieczeństwem i higieną pracy zgodnie z normą ISO 45001:2018, Wydawnictwo Politechniki Rzeszowskiej, Rzeszów.
2. Marcinkowski J., (2013), Systemowe kształtowanie bezpieczeństwa pracy w działalności usługowej, Wydawnictwo Politechniki Poznańskiej, Poznań.
3. Krause M., (2020), Podstawy inżynierii bezpieczeństwa, Wydawnictwo Politechniki Śląskiej, Gliwice.
4. Kołodziński E. (red.) (2015), Modelowanie w inżynierii bezpieczeństwa, Wydawnictwo Wojskowej Akademii Technicznej, Warszawa
5. Regulacje prawne dotyczące omawianych zagadnień.
6. Ficoń K., (2007) Inżynieria zarządzania kryzysowego. Podejście systemowe. BEL Studio Sp. z o.o., Warszawa.

Additional:

1. Ewertowski T., (2018), Doskonalenie systemu zgłaszania zdarzeń niepożądanych w organizacjach w kontekście wdrażania przez nie normy ISO 45001:2018, Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie - 2018, nr 78, s. 19-34.
2. Ewertowski T., Kubicka K., (2020), Impact of occupational health and safety management system on the performance of occupational health and safety in a selected construction company - a case study, Proceedings of the 36th International Business Information Management Association Conference (IBIMA), 4-5 November 2020, Granada, Spain. Sustainable Economic Development and Advancing Education Excellence in the era of Global Pandemic / red. Khalid S. Soliman: International Business Information Management Association, IBIMA, 2020 - s. 6601-6612.
3. Ewertowski T., Butlewski M., (2021), Development of a Pandemic Residual Risk Assessment Tool for Building Organizational Resilience within Polish Enterprises, International Journal of Environmental Research and Public Health - 2021, vol. 18, iss. 13, s. 6948-1-6948-14.
4. Sławińska M., Berlik M., Ewertowski T., Derbich M., Król I., (2019), Skuteczność zarządzania operacyjnego na podstawie bazy informacji eksploatacyjnej, Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie, nr 80, s. 235-251.
5. Ewertowski T., Kubasiński S. (2021), Multi-Criteria Comparative Analysis of Proactive Safety Strategy of An Organization Exemplified by Polish Companies [w]: Proceedings of the 37th International Business Information Management Association Conference (IBIMA), 30-31 May 2021, Cordoba, Spain. Innovation Management and information Technology impact on Global Economy in the Era of Pandemic / red. Soliman Khalid: IBIMA Publishing, s. 10638- 10646.

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	9	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	41	1,50