COURSE DESCRIPTION CARD - SYLLABUS

Course name
Basics of safety management

Course

Field of study
Safety Engineering
Area of study (specialization)

Level of study
First-cycle studies
Form of study
full-time

Year/Semester
1/2
Profile of study
general academic
Course offered in
English
Requirements
compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials
15

Projects/seminars

Number of credit points

2

Lecturers

Responsible for the course/lecturer:
Ph.D., Eng.Tomasz Ewertowski,

Mail to: tomasz.ewertowski@put.poznan.pl

Phone: 61 665 33 64

Faculty of Engineering Management

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

Responsible for the course/lecturer:

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. The student has advanced knowledge in the issues of technical safety, safety systems, occupational health and safety as well as threats and their effects [K1_W02]

2. The student has advanced knowledge of threats and their effects, risk assessment in the work environment as well as occupational accidents and diseases [K1_W03].

3. The student hasin advanced knowledge of ergonomics, human ecology and environmental protection [K1_W05].

4. The student knows the issues of management and organization as well as marketing and logistics in the context of safety engineering [K1_W08].

Skills

1. The student is able to use various techniques to communicate in a professional environment and in other environments [K1_U02]

2. The student is able to see system and non-technical aspects in engineering tasks, as well as socio-technical, organizational and economic [K1_U03].

3. The student is able to prepare the necessary resources for work in an industrial environment and knows the safety rules related to this work and can enforce their use in practice [K1_U05].

4. The student is able to make a critical analysis of the way of functioning and evaluate, in connection with Safety Engineering, the existing technical solutions, in particular machines, devices, objects, systems, processes and services [K1_U06].

5. The student is able to apply standards and norms in solving practical engineering tasks in the field of Safety Engineering. [K1_U08]

Social competences

1. The student is aware of the recognition of the importance of knowledge in solving problems in the field of safety engineering and continuous improvement [K1_K02].

2. The student is aware of behaving in a professional manner, observing the rules of professional ethics and respecting the diversity of views and cultures [K1_K06].

3. The student is aware of the responsibility for their own work and readiness to submit to the rules of working in a team and bearing responsibility for jointly performed tasks [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

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 zarzadzania bezpieczeństwem i higieną pracy zgodnie z normą ISO 45001:2018, Wydawnictwo Politechniki Rzeszowskiej, Rzeszów.

2. Marcinkowski J., (2013), Systemowe kształtowanie bezpieczeństwa pracy w działanosci 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 Akademi Technicznej, Warszawa

5. Regulacje prawne dotyczace 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	2,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, preparation for tests, project preparation) [1]	35	1,0

[1] delete or add other activities as appropriate