COURSE DESCRIPTION CARD - SYLLABUS

Course name
Comprehensive safety management [S2IBiJ1>KZB]

Course

Field of study
Safety and Quality Engineering

Year/Semester
1/1

Area of study (specialization)
–

Profile of study
general academic

Level of study
second-cycle

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
0

Other (e.g. online)
0

Tutorials
30

Projects/seminars
15

Number of credit points

4,00

Coordinators

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Lecturers

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Prerequisites

A student who starts this course should have basic knowledge of managing selected areas of the organization's functioning. He should also have knowledge of occupational health and safety, be able to indicate non-compliance with safety requirements and propose a way to remove them.

Course objective

Consolidating knowledge in the field of shaping occupational safety and familiarizing students with the basic issues related to the course of the occupational health and safety management process. Getting to know the issues related to the possibility of integrating the management systems implemented in the organization.

Course-related learning outcomes

Knowledge:
1. Student knows in depth the methods and theories used in solving the problems of modern safety

engineering, quality, ergonomics and occupational safety as well as in crisis management [K2_W03].
2. Student knows in depth legal, ethical and social aspects taken into account in professional activity in the field of safety engineering, quality, ergonomics and occupational safety and crisis management [K2_W10].
3. Student knows in depth the principles of creating and developing various forms of entrepreneurship related to safety engineering, quality, ergonomics and work safety as well as crisis management [K2_W12].

Skills:
1. Student is able to develop and properly apply methods and tools for solving complex problems characteristic of the area of safety engineering, quality, ergonomics and work safety as well as crisis management, or select and apply modern methods and tools [K2_U03].
2. Student is able to identify and recognize threats in the work environment, assess their impact on the individual, organization and its stakeholders, and indicate methods of conduct aimed at minimizing the effects of threats, taking into account pro-ecological solutions [K2_U10].

Social competences:
1. Student is critical of his knowledge, is ready to consult experts when solving cognitive and practical problems related to security management [K2_K01].
2. Student is ready to initiate activities related to improving safety [K2_K03].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:
- exercises: assessment of reports on completed exercises and assessment of tasks to be performed by the student according to the following scale of points, from 0 to 5: very good - from 4.6 to 5; good plus - from 4.1 to 4.5; good - from 3.6 to 4.0; sufficient plus - from 3.1 to 3.5; sufficient - from 2.5 to 3.0; insufficient - from 0 to 2.4,
- project classes: assessment of progress in the implementation of the project task (according to the adopted schedule of the project task implementation) taking into account the activity during the classes according to the following scale of points, from 0 to 5: very good - from 4.6 to 5; good plus - from 4.1 to 4.5; good - from 3.6 to 4.0; sufficient plus - from 3.1 to 3.5; sufficient - from 2.5 to 3.0; insufficient - from 0 to 2.4,
- lectures: the acquired knowledge is verified by two 15-minute tests carried out at the 2nd and 5th lecture. Each test consists of 3-5 questions (test and open-ended) with different points (on a scale from 0 to 2); the student receives credit after reaching at least 50% of the possible points.
Summative assessment:
- exercises: the average of the grades for prepared reports of planned exercises, the student receives a grade according to the following scale of points, from 0 to 5: very good - from 4.6 to 5; good plus - from 4.1 to 4.5; good - from 3.6 to 4.0; sufficient plus - from 3.1 to 3.5; sufficient - from 2.5 to 3.0; insufficient - from 0 to 2.4,
- project classes: evaluation of the completed project, taking into account the assessment of progress in the implementation of the project task and activity during project classes, according to the following scale of points, from 0 to 5: very good - from 4.6 to 5; good plus - from 4.1 to 4.5; good - from 3.6 to 4.0; sufficient plus - from 3.1 to 3.5; sufficient - from 2.5 to 3.0; insufficient - from 0 to 2.4,
- lectures: acquired knowledge is verified during an oral exam. The student answers 3 open questions, which are scored on a scale from 0 to 2; receives a positive assessment after reaching at least 50% of the possible points.

Programme content

Lecture: Business Continuity Management, multi-faceted methodology of business process risk analysis and management, integrated occupational health and safety management, organizational success factors in relation to systemic occupational health and safety management, methodology of occupational health and safety system management: organizational context, leadership, participation , responsibility, health and safety policy, planning comprehensive activities, resilience engineering, aspects of organizational resilience, dynamic indicators, risk management standards, risk management tools, organizational excellence levels in relation to comprehensive occupational health and safety management, assessment of improvement activities, digitalization and innovation, security policy, Zero

Trust Security concept.
Classes: during the implementation of subsequent topics of classes, the student performs the following tasks, concerning the assessment of the internal context of the organization in the systemic approach to occupational safety management; assumptions for the integration of projects at the level of the policy adopted in the organization using the TOWS analysis; defining the requirements of integrated work safety management based on the guidelines of applicable standards, e.g. ISO 45 001:201;, process approach in system health and safety management; dealing with risk using key performance indicators and performance measures.
Project: students design preventive measures and a risk management program for a selected manufacturing process indicated by the teacher.

Teaching methods

- lecture classes: a lecture of a conversational nature. The lecture is conducted using distance learning techniques in a synchronous mode. Acceptable platforms: eMeeting, Zoom, Microsoft Teams,
- exercises: the method of expert tables interchangeably with the method of cases,
- project: multi-stage cognitive task.

Bibliography

Basic:
1. Sławińska M., Kubasiński S., (2021). Designing the Conditions for the Proactive Attitude of Employees to Increase Organizational Resilience, European Research Studies Journal Volume XXIV Special Issue 5, p.
697-708.
2. Sławińska M., (2019), Ergonomic engineering of technological devices, Wydawnictwo Politechniki Poznańskiej, 129 s.
3. Kubasiński S., Sławińska M., (2019), Doskonalenie bezpieczeństwa pracy w świetle wymagań ISO 45001, [w:] Nauka i praktyka w bezpieczeństwie pracy, środowisku i zarządzaniu / red. Danuta Zwolińska - Katowice, Polska: Wyższa Szkoła Zarządzania Ochroną Pracy, s. 131-142.
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7. PN-ISO 45001:2018-06, Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania i wytyczne stosowania, PKN, Warszawa.
8. PN-EN ISO 19011:2018-08, Wytyczne dotyczące auditowania systemów zarządzania, PKN, Warszawa.

Additional:
1. Kubasiński S., Sławińska M., (2021). Research on Corporate Social Responsibility (CRS) in Terms of Work Safety, European Research Studies Journal Volume XXIV Special Issue 5, p. 626-636.
2. Sławińska M., Wróbel K., (2021). Indicative Method of Human Failure in Sustainable Chain of Custody Management. European Research Studies Journal Volume XXIV Special Issue 5, p. 709-725.
3. Berlik M., Sławińska M., (2020), The Elements of Technical Support for Integrated Safety Management in The Industry 4.0, [w:] 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, p. 11965-11973.
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5. Sławińska M. i inni (2019), Skuteczność zarządzania operacyjnego na podstawie bazy informacji

eksploatacyjnej, Zeszyty Naukowe Politechniki Poznańskiej, Seria: Organizacja i Zarządzanie, Nr 80, ss. 235-250.
6. Górny A., Sławińska M., Sobczak W. (2016), Ocena kompetencji jako narzędzie zapewnienia bezpieczeństwa w przedsiębiorstwie budowalnym, Finanse, Rynki Finansowe, Ubezpieczenia, nr 5 (83/2), s. 109-119.
7. Szopa T., (2016), Niezawodność i bezpieczeństwo, Oficyna Wydawnicza Politechniki Poznańskiej, Warszawa.
8. Kępka P. (2015), Projektowanie systemów bezpieczeństwa, BEL Studio, Warszawa, ISBN: 978-83-7798-
232-7.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	40	1,50