POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Formation of safety and quality culture [N1IBiJ1>KKBiJ]

Course

Field of study Year/Semester

Safety and Quality Engineering 2/4

Area of study (specialization) Profile of study

general academic

Course offered in Level of study

first-cycle Polish

Form of study Requirements

elective part-time

Number of hours

Lecture Laboratory classes Other 0

9

Tutorials Projects/seminars

9

Number of credit points

4,00

Coordinators Lecturers

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Prerequisites

The student has a basic knowledge of ergonomics and work psychology. The student is able to recognize and analyze cause-and-effect relationships in the area of health and safety and is aware of the importance of human behavior in the process of ensuring work safety and quality.

Course objective

The objective is to familiarize students with the global idea of a safety and quality culture, in particular the concept of a safety culture at work; Acquiring by students the ability to perceive various aspects of safety and quality culture and connect them around a common idea of shaping personal and group safety Convincing students to use available tools to measure the safety climate at work in order to build the desired level of safety and quality culture in the enterprise and beyond.

Course-related learning outcomes

Knowledge:

- 1. The student knows the issues of management and organization in the context of building the desired level of safety and quality culture at work. [K1 W08]
- 2. The student knows the problems arising from the activities of enterprises in the labor market

environment, understands the mutual relationship between them and the role played in this relationship by the attitude of management and employees in relation to safety and quality. [K1 W13]

Skills:

- 1. The student is able to properly select the sources and information derived from them and on their basis to analyze, synthesize and evaluate problems in the field of forming the safety and quality culture. [K1 U01]
- 2. The student is able to percive system and non-technical aspects in engineering tasks, as well as sociotechnical, organizational and economic aspects, influencing the need to model employee behavior towards high safety and quality culture [K1 U03].
- 3. The student is able to use analytical, simulation and experimental methods to formulate and solve engineering tasks, also with the use of information and communication methods and tools, taking into account the human factor in shaping the desired level of safety and quality. [K1 U04]
- 4. The student is able to take part in the debate and to present, using appropriately selected means, the problem related to the process of shaping the safety and quality culture, barriers in this process and possible ways of overcoming them. [K1 U09]

Social competences:

- 1. The student is able to initiate activities related to the formulation and transfer of information and cooperation in the society in the area of safety and quality engineering [K1_K05].
- 2. The student is aware of the responsibility for his own work and readiness to submit to the rules of teamwork and responsibility for jointly performed tasks to achieve team goals [K1_K07].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

Lecture: knowledge is verified by a test in the form of a single-choice test after the second didactic unit (checking the knowledge of basic concepts and principles of analysis in relation to the given problem); 1st and 2nd attempt credit threshold: 50% + 1%;

Exercises: skills and social competences are verified by giving partial grades, resulting from: prepared presentation for a selected topic, implementation of subsequent tasks and activity during the analysis of a given problem; 1st and 2nd attempt credit threshold: 50% + 1%;

Project: partial evaluation of individual parts of the project, presentation of the initial results of the project in class; 1st and 2nd attempt credit threshold: 50% + 1%;

Summative assessment:

Lecture: knowledge is verified through a written summary test in the form of a single-choice test; 1st and 2nd attempt credit threshold: 50% + 1%;

Exercises: average of partial grades for completed tasks; 1st and 2nd attempt credit threshold: 50% + 1%;

Project: the average of partial grades for the substantive evaluation of individual parts of the project + evaluation for the editing level of the project; 1st and 2nd attempt credit threshold: 50% + 1%.

Programme content

Issues of shaping the culture of safety and quality in the modern work environment, including practical measurement methods.

Course topics

Theoretical foundations of a safety and quality culture. Security sectors and their participation in the understanding of a safety and quality culture; Organizational culture and security and quality culture - conditions and correlations. Quality based management; Work safety culture; Safety culture and safety climate - relationship model. Accident versus safety and quality culture; Methods for measuring the safety and quality climate at work.

Teaching methods

Lecture: information lecture, seminar lecture.

Exercises: exposing methods (film, multimedia show), seminar discussion, simulating expert debates, case study, brainstorming.

Project: case study, multimedia presentation.

Bibliography

Basic:

- 1. Wiśniewska Z. M., Grudowski P., Kultura jakości, doskonałości i bezpieczeństwa w organizacji, CeDeWu, Warszawa 2019.
- 2. Sadłowska-Wrzesińska J. (2018), Kultura bezpieczeństwa pracy. Rozwój w warunkach cywilizacyjnego przesilenia, Oficyna Wydawnicza Aspra-JG, Warszawa.
- 3. Sadłowska-Wrzesińska J., Lewicki L. (2018), Podstawy bezpieczeństwa i zdrowia w pracy, Wyd. WSL, Poznań.
- 4. Rakowska A. (red.) (2013), Kultura bezpieczeństwa w przedsiębiorstwie. Modele, diagnoza, kształtowanie, CeDeWu Warszawa.
- 5. Ejdys J., Kształtowanie kultury bezpieczeństwa i higieny pracy w organizacji, dostęp: http://pbc.biaman.pl/Content/27652/Kszta%C5%82atowanie_kultury_bezpiecze%C5%84stwa_i_higieny pracy.pdf.

Additional:

- 1. Lewicki L., Sadłowska-Wrzesińska J. (2014), Istotne aspekty BHP, Wyd. WSL, Poznań.
- 2. Sadłowska-Wrzesińska J. (2016), Promowanie bezpieczeństwa i zdrowia w pracy a kształtowanie kultury bezpieczeństwa, [w]: AUNC, Acta Universitatis Nicolai Copernici Zarządzanie, ss.173-185. DOI: http://dx.doi.org/10.12775/AUNC_ZARZ.2016.012.
- 3. Czernecka W., Butlewski M. (2021), Success Factors of Ergonomic Committee's Performance within Production Companies, European Research Studies Journal, vol. 24, spec. iss. 5, s. 439- 448.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	27	1,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	73	3,00