#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Health promotion and occupational health [N2IBiJ1-JiEwBP>PZiHP]

Course

Field of study Year/Semester

Safety and Quality Engineering 1/2

Area of study (specialization) Profile of study

Quality and Ergonomics in Work Safety general academic

Course offered in Level of study

second-cycle Polish

Form of study Requirements

elective part-time

Number of hours

Lecture Laboratory classes Other 0

10

**Tutorials** Projects/seminars

10 10

Number of credit points

4,00

Coordinators Lecturers

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# **Prerequisites**

The student has basic knowledge of ergonomics and occupational safety, is able to interpret the relationships occurring in the human-technical object system, as well as to organize work taking into account the reduction of physical and mental loads on the human body. In addition, the Student is aware of the social role of a technical graduate and understands the validity of health promotion activities in the workplace.

# Course objective

To explain the essence of health promotion in the work environment with emphasis on its special role for building a high level of occupational safety and health. To impart knowledge on the principles of constructing workplace health promotion programs.

## Course-related learning outcomes

#### Knowledge:

- 1. The student has an in-depth knowledge of the development trends and good practices of occupational health and safety management in organizations, both locally and globally [K2\_W04].
- 2. The student has an in-depth knowledge of the fundamental dilemmas of modern civilization,

including legal, political, economic, ethical and moral transformations related to safety engineering, quality, ergonomics and occupational safety, which affect the protection of workers' health and the promotion of health in the workplace [K2 W11].

#### Skills:

- 1. The student is able to properly select sources, including literature sources and information from them, as well as to evaluate, critically analyze, synthesize and creatively interpret this information, formulate conclusions and comprehensively justify an opinion when presenting the results of research on health risks and health promotion in the workplace [K2 U01].
- 2. The student is able to identify changes in requirements, standards, regulations, innovations and technical progress and economic reality and use them appropriately in solving problems in the field of safety engineering, quality, ergonomics and occupational safety concerning health promotion in the workplace [K2 U10].
- 3. the student is able to identify and recognize hazards in the work environment, assess their impact on the individual, the organization and its stakeholders, and identify methods of action aimed at minimizing the effects of occupational health hazards [K2 U13].

#### Social competences:

- 1. The student correctly identifies and resolves dilemmas related to safety in the work environment, understands the need to make the public aware of the need for the formation of pro-health attitudes and safe behavior, both in and outside the work environment [K2 K02].
- 2. The student is prepared to reliably perform professional roles resulting from current economic and social needs, taking into account the principles of occupational safety and health, with particular emphasis on health promotion in the workplace [K2 K06].

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

#### Formative assessment:

Lecture: knowledge is verified by short colloquia after the second and fourth teaching units on the solution of a problem task. Credit threshold: 51%.

Exercises: skills and social competencies are verified through partial grades, resulting from the performance of work in teams, bonus activity and independent problem solving. Credit threshold: 51%. Project: evaluation of individual stages of projects. Passing threshold: 51%.

Summative assessment:

Lecture: knowledge is verified by oral examination covering basic concepts related to human functioning in the work environment, including problems of occupational hygiene - methodology of diagnosing these problems and issues of health promotion in the workplace. Passing threshold: 51%.

Exercises: average of partial grades. Credit threshold: 51%.

Project: evaluation of the Health Promotion Strategy prepared by the students in the selected workplace. Passing threshold: 51%.

Rating scale:

91-100 5

81-90 4,5

71-80 4

61-70 3,5

51-60 3

#### Programme content

Lecture: Health as a value for the individual, organization, society. Contemporary approaches to the concept of health. Occupational diseases and work-related illnesses - an overview of recent developments. Hygiene versus occupational hygiene. The relationship of occupational hygiene to occupational safety and ergonomics and quality. Harmful and arduous factors for health. Limits of tolerance of the human body. Psychophysiological aspects of work organization, with particular emphasis on shift work and overtime. Fatigue curve. Increasing problems of static loads and mental fatigue. Hygiene of rest and leisure. Health promotion strategies of local, national international scope. Formation of a culture of health safety in the work environment.

Exercises: Technical and organizational principles of formation of conditions of employee welfare (sanitary and hygienic premises, environment of the workplace). Organization of the work of women,

the elderly, adolescents. Hygienic evaluation of working conditions. Legislation on occupational health protection. Standards related to the determination of permissible changes in the work environment (concerning chemical substances and mixtures, carcinogens, harmful biological factors, microclimate). Principles of prevention of occupational diseases and other work-related diseases. Principles of construction of health promotion programs

Project: Preparation of a project entitled Health promotion strategy in a selected workplace. Stages of work: Guidelines for the project. Editorial requirements. Analysis of the theoretical assumptions for the project. Research problem and research questions. Selection of the research method and technique. Implementation of the various stages of the project.

#### **Course topics**

none

#### **Teaching methods**

Lecture: multimedia presentation illustrated with examples, informative lecture, conversational lecture. The lecture is conducted using distance learning techniques in a synchronous mode. Acceptable platforms: eMeeting, Zoom, Microsoft Teams.

Exercises: multimedia presentation illustrated with examples, practical exercises, chat, expository methods (film, demonstration), panel discussion, simulation of expert debates, case study, brainstorming.

Project: multimedia presentation illustrated by examples given on the blackboard and performance of project tasks.

## **Bibliography**

#### Basic:

- 1. Sadłowska-Wrzesińska J., Lewicki L., Podstawy bezpieczeństwa i zdrowia w pracy, Wydawnictwo WSL. Poznań. 2018.
- 2. Wejman M., Higiena pracy, Wyd. Politechniki Poznańskiej, Poznań 2012.
- 3. Woynarowska B, (red.), Edukacja zdrowotna. Warszawa, Wydawnictwo Naukowe PWN, Warszawa, 2017.

## Additional:

- 1. Woynorowska B., Kowalewska A., Izdebski Z., Biomedyczne podstawy rozwoju i edukacji, Wydawnictwo Naukowe PWN, Warszawa, 2021.
- 2. Puchalski K., Korzeniowska E., Promocja zdrowia w zakładzie pracy: wsparcie dla zdrowego odżywiania się i aktywności fizycznej pracowników, dostęp: https://promocjazdrowiawpracy.pl/wp-content/uploads/2018/10/Promocja-zdrowia-w-zakladzie-pracy2-1.pdf
- 3. Sadłowska-Wrzesińska J., Kultura bezpieczeństwa pracy. Rozwój w warunkach cywilizacyjnego przesilenia, Aspra, Warszawa, 2018.
- 4. Sadłowska-Wrzesińska J., Piosik, K., Nejman, Ż., Psychosocial Context of OSH-Remote Work of Academic Teachers in the Perspective of Sustainable Development, International Journal of Environmental Research and Public Health, 19, 022, pp. 14783-1-14783-16, 2022.
- 5. Gembalska-Kwiecień A., Skotnicka-Zasadzień B., Wolniak R., Bujn M., Creating Participation of Employees in Improving Work Safety in Enterprise, MAPE 2018, volume 1, issue 1, pp. 689-694.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	70	3,00