

COURSE GUIDE

<u>Subject name</u>	Shaping work environment
<u>Course of study</u>	Quality and Production Management
<u>The form of study</u>	Full-time
<u>Level of qualification</u>	First
<u>Year</u>	III
<u>Semester</u>	V
<u>The implementing entity</u>	Department of Production Engineering and Safety
<u>The person responsible for preparing</u>	dr hab. inż. Dorota Klimecka-Tatar
<u>Profile</u>	General academic
<u>ECTS points</u>	2

TYPE OF TEACHING – NUMBER OF HOURS PER SEMESTER

LECTURE	CLASS	LABORATORY	PROJECT	SEMINAR
30		15	-	-

COURSE AIMS

- C1. Presentation and discussion of basic definitions, concepts and legal norms related to occupational health and safety.
- C2. Discussion of factors affecting the health and safety work in enterprises, the presentation requirements for buildings, work premises and their equipment and for machinery and other technical devices.
- C3. Characteristics of individual and collective protection - prevention of occupational health.

ENTRY REQUIREMENTS FOR KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Student can explain the concept of work safety.
2. Student has a basic knowledge of hazards occurring in the work environment.
3. Student understands the purpose and scope of the work safety service.
4. Student knows the basic consequences of non-compliance with health and safety at work - occupational diseases and accidents at work.

LEARNING OUTCOMES

- EU1. Student knows the basic legal norms relating to the rights and obligations of the employee and employer.
- EU2. Student is able to characterize and adjust appropriate personal and collective protection to the needs of the enterprise.
- EU3. The student knows simple methods of hazard identification and occupational risk assessment.
- EU4. Student knows the factors shaping the work environment.

COURSE CONTENT

Type of teaching – LECTURE	Number of hours
W1. Basic concepts and definitions related to health and safety at work; traditional and contemporary approach to health and safety at work issues.	4
W2. Legal aspects of occupational health and safety in national and international regulations.	2
W3. Factors shaping health and safety at work in enterprises.	4
W4. Hazards in the workplace - division and characteristics.	6
W5. Effects of non-compliance with health and safety at work in the company - occupational diseases and accidents at work.	2
W6. Prevention of occupational health protection.	2

W7. Risk assessment.	4
W8. Measures to assess the health and safety of work.	4
W9. Causes of accidents in enterprises - analysis of reports.	2
Type of teaching - LABORATORY	Number of hours
L1. Organizational classes. Acquainting with the laboratory regulations. Presentation of the requirements for attendance and the conditions for passing the subject.	1
L2. Identification of factors shaping the working environment	2
L3. The behavior of the human body during physical work - measurement of physical capacity on the basis of blood pressure	2
L4. The influence of occupational stress on the phenomena occurring in the human body	1
L5. Measurement of noise level in a closed room	1
L6. Assessment of microclimate parameters and testing of thermal comfort in a working room	2
L7. Assessment of the vibration level and analysis of the impact of mechanical vibrations on the human body during work	1
L8. Assessment of lighting parameters in a closed room. The impact of lighting on the human body and the safety of employee tasks	2
L9. Occupational risk assessment at the selected workplace and corrective actions, taking into account collective and individual protection measures	2
L10. Final test of laboratory exercises	1

TEACHING TOOLS

1. Manuals and scripts.
2. Audiovisual equipment.
3. Measuring devices: lux meter, dosimeter, vibration meter, microclimate meter.

WAYS OF ASSESSMENT (F – FORMATIVE, P – SUMMATIVE)

- F1. Active participation in laboratory classes.
P1. Evaluation for reports on individual laboratory exercises.
P2. Evaluation of the final test.

STUDENT WORKLOAD

Form of activity		Average number of hours for realization of the activity		
		[h]	ECTS	ECTS
Contact hours with the teacher	Lecture	30	1.2	1.2
Contact hours with the teacher	Laboratory	15	0.6	0.64
Preparation for laboratoria classes		1	0.04	
Consultation		4	0.16	0.16
TOTAL NUMBER OF HOURS / ECTS POINTS FOR SUBJECT		50	2	

BASIC AND SUPPLEMENTARY RESOURCE MATERIALS

Basic resources

1. Arnold J., Silvester J. Work psychology: Understanding human behaviour in the workplace. London 2005.
2. Hedge A. Ergonomic Workplace Design for Health, Wellness, and Productivity. Boca Raton 2016.
3. Christie F., Martin J.R. Genre and institutions: Social processes in the workplace and school New York 2005.
4. Pheasant S., Haslegrave C.M. Bodyspace: Anthropometry, Ergonomics and the Design of Work. Boca Raton 2016.

- Niciejewska M., Klimecka-Tatar D. Difficulties in Work Safety Management in a Company Producing Steel Flat Bars. [in:] 26th International Conference on Metallurgy and Materials (METAL 2017), Brno, 2017.
- Niciejewska M., Klimecka-Tatar D. Evaluation of Static Load in Dentists' Work by Means of OWAS Method. Czasopismo Techniczne. Mechanika, 2016 3M/113, s. 125-130.

Supplementary resources

- Webster J. Shaping Women's Work: Gender, Employment and Information Technology. New York 1996.
- Eastman Kodak Company: Kodak's Ergonomic Design for People at Work, 2004.
- Nielson R., Jorgensen K. Advances In Industrial Ergonomics And Safety, Bristol 2003.

TEACHERS (NAME, SURNAME, E-MAIL ADDRESS)

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MATRIX OF LEARNING OUTCOMES REALISATION

Learning outcome	Reference of given outcome to outcomes defined for whole program (PRK)	Course aims	Course content	Teaching tools	Ways of assessment
EU1	K_W02, K_W03, K_W04, K_W05, K_W07, K_W08, K_W10, K_U04, K_U05, K_U07, K_U09, K_U10, K_K02, K_K04	C1	W1, W2, W3, L1	1, 2	F1, P2
EU2	K_W02, K_W03, K_W04, K_W05, K_W07, K_W08, K_W10, K_U04, K_U05, K_U07, K_U09, K_U10, K_K02, K_K04	C2, C3	W4, W5, W6, W9, L1-L10	1, 2, 3	F1, P1, P2
EU3	K_W02, K_W03, K_W04, K_W05, K_W07, K_W08, K_W10, K_U04, K_U05, K_U07, K_U09, K_U10, K_K02, K_K04	C3	W7, W8, W9	1, 2, 3	F1, P1, P2
EU4	K_W02, K_W03, K_W04, K_W05, K_W07, K_W08, K_W10, K_U04, K_U05, K_U07, K_U09, K_U10, K_K02, K_K04	C2, C3	W4, W5, W6, W9, L1-L10	1, 2, 3	F1, P1, P2

FORM OF ASSESSMENT - DETAILS

	grade 2	grade 3	grade 4	grade 5
EU1	Student does not know the basic legal norms relating to the rights and obligations of the employee and employer.	Student knows the basic legal norms pertaining to the rights and obligations of the employee and employer.	Student knows the basic legal norms relating to the rights and obligations of the employee and employer in comparison with the regulations prevailing in other EU countries.	Student knows legal norms pertaining to the rights and obligations of an employee and employer in Poland and international law.
EU2	Student does not know the personal protective equipment.	Student knows the basic personal protective equipment.	Student knows the basic personal and collective protective equipment, can characterize them.	Student knows the basic personal and collective protective equipment, can characterize them and adapt them to the appropriate workplace.
EU3	Student does not	Student can identify	Student can identify	Student is able to

	know any method of risk identification and occupational risk assessment.	hazards in the workplace.	hazards in the workplace and assess occupational risk with one selected method.	identify hazards present in the workplace and assess occupational risk with two known methods.
EU4	Student does not know the factors shaping the work environment.	Student lists only some factors shaping the work environment.	Student knows the factors shaping the work environment.	Student knows the factors shaping the work environment, is able to assess their impact on work safety.

ADDITIONAL USEFUL INFORMATION ABOUT THE COURSE

1. Information where presentation of classes, instruction, subjects of seminars can be found, etc. - presented to students during first classes, if required by the formula classes are sent electronically to the e-mail addresses of individual dean groups.
2. Information about the place of classes - Information can be found on the website of the Faculty of Management.
3. Information about the timing of classes (day of the week / time) - Information can be found on the website of the Faculty of Management.
4. Information about the consultation (time + place) - Information can be found on the website of the Faculty of Management.