Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Faculty of Chemical Technology and Engineering

Field of study	Chemical Engineering		
Mode of study	stationary	*Level*	first cycle
Graduate's qualification	inżynier		
Area(s) of study	nauki techniczne		
Educational profile	general academic		
Module			
Course unit	**Ergonomics and HSW**		
Code	ChEn_1A_S_A04		
Field of specialisation			
Administering faculty	Institute of Inorganic Chemical Technology and Environmental Engineering		
ECTS	1,0	*ECTS (forms)*	1,0
Form of course credit	credits	*Language*	english
Electives		*Elective group*	

Form of instruction	*Code*	*Semester*	*Hours*	*ECTS*	*Weight*	*Credit*
lecture	W	1	15	1,0	1,00	credits

Leading teacher	Michalkiewicz Beata (Beata.Michalkiewicz@zut.edu.pl)
Other teachers	Michalkiewicz Beata (Beata.Michalkiewicz@zut.edu.pl)

Prerequisites

W-1	no prerequisites

Module/course unit objectives

C-1	Gaining knowledge about the problems of occupational health and safety and ergonomics
C-2	Getting ability to apply OHS regulations in laboratory and industry
C-3	Awareness of importance non-technical aspects and conseaware quences of chemical engineering activity

Course content divided into various forms of instruction		*Number of hours*
T-W-1	Legal regulations in the field of occupational health and safety in the law of the European Union and Poland	3
T-W-2	Ergonomics	2
T-W-3	Interaction between Human and Technical Systems	1
T-W-4	Work with dangerous chemicals or processes	2
T-W-5	Workplace diagnostics	2
T-W-6	Certification of products, machines and devices to meet safety requirements	1
T-W-7	Accidents at work	1
T-W-8	Occupational disease, occupational risk	2
T-W-9	Safety Management	1

Student workload - forms of activity		*Number of hours*
A-W-1	Lectures	15
A-W-2	Studing the literature	8
A-W-3	preparation for passing test	7

Teaching methods / tools

M-1	lecture

Evaluation methods (F - progressive, P - final)

S-1	P	test

Designed learning outcomes	Reference to the learning outcomes designed for the fields of study	Reference to the learning outcomes defined for the particular areas of education	Reference to learning outcomes leading to the degree of "inżynier"	Course objectives	Course content	Teaching methods	Evaluation methods
Knowledge							
ChEn_1A_A04_W01 Has knowledge necessary to understand non-technical conditions of chemical engineering activity and knows HSW rules applicable in industry especially chemical industry	ChEn_1A_W16 ChEn_1A_W19	P6S_WG_TA11 P6S_WK_TA11	P6S_WG_IA11 P6S_WK_IA11	C-1	T-W-1 T-W-6 T-W-3 T-W-7 T-W-4 T-W-8	M-1	S-1

Skills							
ChEn_1A_A04_U01 is able to apply OHS regulations in laboratory and industry	ChEn_1A_U05 ChEn_1A_U12 ChEn_1A_U13	P6S_UU P6S_UW_TA12	P6S_UW_IA12	C-2	T-W-5 T-W-9 T-W-6	M-1	S-1
Other social / personal competences							
ChEn_1A_A04_K01 Is aware of importance non-technical aspects and consequences of chemical engineering activity, including its influence on the environment and people and the related responsibility for the decisions taken.	ChEn_1A_K02	P6S_KO		C-3	T-W-2 T-W-9	M-1	S-1

Required reading

1. Benjamin O. Alli, Fundamental Principles of Occupational Health and Safety, International Labour Office, Geneva,, 2008

Supplementary reading

1. Laboratory Safety Guidance, Occupational Safety and Health Administration U.S. Department of Labour, 2011