

<b>Course title</b> BHP i ergonomia/Work safety and ergonomics		<b>ECTS code</b> 13.3.0661	
Name of unit administrating study Faculty of Chemistry			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	
Chemical	Bachelor	Full-time studies	
<b>Teaching staff</b> Dr Waldemar Nowicki			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b> 1	
<b>A. Forms of classes, in accordance with the UG Rector's regulations</b> lecture		classes - 15 h tutorial classes – 2 h student's own work – 8 h	
<b>B. The realization of activities</b> in-class learning		Total: 25 h - 1 ECTS	
<b>C. Number of hours</b> 15 h lecture			
<b>The academic cycle</b> 2019/20 winter semester			
<b>Type of course</b> obligatory		<b>Language of instruction</b> Polish	
<b>Teaching methods</b>  Lecture with multimedia presentation		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
		<b>A. Final evaluation, in accordance with the UG study regulations</b> course completion (with a grade)	
		<b>B. Assessment methods</b> written test, pass with grade	
<b>Required courses and introductory requirements</b> no prerequisites			
<b>Aims of education</b> <ul style="list-style-type: none"> <li>• familiarize students with all the issues mentioned in the lecture's program content,,</li> <li>• familiarization with the existing legal status of labor protection; with the rules of behavior in the event of an emergency and awareness of the duties and rights of the employee and employer.</li> <li>• transfer of interdisciplinary knowledge about man in the work environment.</li> </ul>			
<b>Course contents</b> Problems of the lecture: Basic regulations and legal issues regarding health and safety at universities (taking into account the specificity of the department). Legal protection of work. Labor Code. The essence of health and safety at work. Fire protection, fire-fighting, use of hand-held fire-fighting equipment. Accidents involving the student, post-accident proceedings. Typical injuries, first aid. Physiological determinants of work performance. Optimal working time, rest breaks. Psychophysical properties of man. Material work environment: physical, chemical and biological factors, microclimate. Risk assessment. Occupational health and safety management. Organization of the workplace. History and development of ergonomics. Ergonomics tasks. Ergonomic assessment of the material work environment. System: human - work station. Ergonomic shaping of the workplace, working position. Evaluation of a computer workstation with a screen monitor.			
<b>Bibliography of literature</b> <b>A. Literature required to pass the course</b> <ol style="list-style-type: none"> <li>1. Rozporządzenie Ministra Nauki i Szkolnictwa Wyższego z dnia 5 lipca 2007 w sprawie bezpieczeństwa i higieny pracy w uczelniach. (Dz. U. Nr 128; poz. 897)</li> <li>2. Zarządzenie Nr 24/R/98 Rektora Uniwersytetu Gdańskiego z dnia 24 września 1998 r.</li> <li>3. Rozporządzenie Ministra Zdrowia z dnia 3 lipca 2002 r. w sprawie karty charakterystyki substancji niebezpiecznej i pre-paratu</li> </ol>			

- niebezpiecznego (Dz. U. z 2002 r. Nr 140 ; poz. 1171) (+ zmiana: Dz.U. nr 2 z 2005 r. poz. 8),  
 4. Ustawa z dnia 24 sierpnia 1991 r. o ochronie przeciwpożarowej (Dz.U. z 2002 r. nr 147 poz. 1229).  
 5. B. Rączkowski BHP w praktyce, ODDK Gdańsk,  
 6. E. Czapnik, H. Wojciechowska-Piskorska, „BHP w laboratoriach chemicznych”, ODDK Gdańsk 2001,  
 7. „Nauka o pracy – bezpieczeństwo, higiena, ergonomia”, Centralny Instytut Ochrony Pracy, Warszawa.  
 8. P. Krzywda „Pierwsza pomoc w nagłych wypadkach”, Wydawnictwo KaBe, Krosno 2007,  
 9. J. Kania „Metody ergonomiczne”, PWE, Warszawa,  
 10. K. Ujma-Wąsowicz, „Ergonomia w architekturze”, Wyd. Politechniki Śląskiej, Gliwice 2005,  
 11. M. Kamińska-Żyła, „Ergonomia stanowiska komputerowego”, AGH Uczelniane Wydawnictwa Naukowo-Dydaktyczne, Kraków 2000

### **B. Extracurricular readings**

#### **Knowledge**

1. knows the basic health and safety regulations and fire protection regulations in force at the university,
2. has knowledge of legal labor protection,
3. knows the institutions responsible for the creation and implementation of labor law,
4. has knowledge about the causes of accidents at work,
5. knows the rules of first aid,
6. knows the basic ergonomic concepts,
7. has knowledge about the basic features of the material working environment,
8. understands the anthropometric principles of shaping the work environment,
9. has knowledge about recommendations regarding optimal parameters of the work environment.

#### **Skills**

1. knows the basic issues related to the organization of work,
2. can find the necessary information on health and safety in Regulations, Laws or the Labor Code,
3. can behave in a fire situation,
4. knows how to use firefighting equipment,
5. understands the need and knows the basic principles of first aid,
6. has the ability to use SDSs of hazardous substances,
7. can assess the risk and apply appropriate personal protection,
8. knows the rules of ergonomic workplace design,

#### **Social competence**

1. understands the need for further education in the field of occupational health and safety,
2. understands the need to use safety data sheets of dangerous substances,
3. can properly prepare a place for laboratory work,
4. is careful in dealing with chemical substances, can foresee and properly plan the necessary personal protection measures.