

Subject card

Subject name and code	Principles of ergonomy, PG_00054151						
Field of study	Geography						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2025/2026		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		Polish		
Semester of study	1		ECTS credits		0.0		
Learning profile	academic		Assessment form				
Conducting unit	Laboratory of Bionanotechnology -> Department of Molecular Biotechnology -> Faculty of Chemistry -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr Ewa Sulecka-Mielewczyk				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	6.0	0.0	0.0	0.0	0.0	6
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	Number of study hours	6		0.0		0.0	6
Subject objectives	1. familiarizing students with all issues mentioned in the lecture program content, 2. getting acquainted with the history of ergonomics and its development, 3. applications of ergonomics in the work environment and at home, 4. transfer of interdisciplinary knowledge about humans in the work environment						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GEOGRL3-U04] plan and carry out, independently and in a team, a simple research procedure in the field of geographical sciences under the guidance of a scientific supervisor	understands and is able to explain the relationship between measurements anthropometrics and workplace design and is able to apply ergonomic solutions at work and in everyday life.	[SU1] oral statement/conversation/discussion [SU5] implementation of a problem task
	[GEOGRL3-U05] find and select the necessary information from professional literature and other sources, including electronic sources	can find the necessary information about ergonomics organized Workplace,	[SU5] implementation of a problem task
	[GEOGRL3-K05] independently undertake and initiate professional behavior, including maintaining the principles of professional ethics in oneself and others, and care for the achievements and traditions of the geography profession	is able to discuss existing solutions from the point of view of ergonomics and is able to apply them both in independent work and in a team	[SK1] oral statement/conversation/discussion
	[GEOGRL3-K02] bear full responsibility for the actions taken actions and adhere to the principles of professional ethics and principles of intellectual honesty, is aware of the importance of a professional approach in professional life professional life	sees the connection between the principles of ergonomics and the issues of professional ethics and the protection of intellectual property	[SK1] oral statement/conversation/discussion
	[GEOGRL3-W10] principles of planning and development of individual entrepreneurship, using geographical knowledge	1. knows basic issues related to work organization 2. knows the principles of ergonomic design of the workplace	[SW5] implementation of a problem task
	[GEOGRL3-K04] social action, including cooperation to preserve the ecological balance and protect the Earth's resources and its sustainable development, using forms of own entrepreneurship for this purpose	is aware of the impact of the socio-economic environment on ecological balance, understands the importance of applying the principles of sustainable development	[SK5] implementation of a problem task
Subject contents	History and development of ergonomics. The essence of occupational health and safety. Tasks of ergonomics. The role of ergonomics in the process of work and learning, basic concepts. Issues of sustainable development and ecology. Conceptual ergonomics and corrective ergonomics. Physiological conditions of work efficiency. Optimal working time, rest breaks. Psychophysical properties of man. Material work environment: physical, chemical, biological factors, microclimate. Human system - work station. Assessment of occupational risk. Organization of work station. Ergonomic assessment of the material work environment. Ergonomic shaping of the work station, working position. Assessment of a computer workstation with a screen monitor. Principles of ergonomic work with a portable computer. First aid		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	attendance	100.0%	100.0%

Recommended reading	Basic literature	1. B. Rączkowski Occupational health and safety in practice, ODDK Gdańsk, 2. "Work science - safety, hygiene, ergonomics", Central Institute for Labor Protection, Warsaw. 3. J. Kania "Ergonomic methods", PWE, Warsaw, 4. Regulation of the Minister of Labor and Social Policy of December 1, 1998 on occupational health and safety at positions equipped with screen monitors.
	Supplementary literature	1. M. Kamieńska-Żyła, "Ergonomics of a computer station", AGH University of Science and Technology Publishing House, Kraków 2000 2. Ergonomic working conditions, WSiP 3. E. Górską Ergonomics. Design-diagnosis-experiments
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	1. Problem task related to work environment factors and occupational risk assessment 2. Problem-solving task related to the ergonomics of the workstation 3. First aid	
Work placement	Not applicable	

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