

Subject card

Subject name and code	Nature and enviromental protection, PG_00207420						
Field of study	Biology						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2027/2028		
Education level	Bachelor's studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study		
Mode of study	full-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		2.0		
Learning profile	academic		Assessment form		credit		
Conducting unit	Laboratory of Geobotanics and Nature Conservation -> Department of Plant Taxonomy and Nature Conservation -> Faculty of Biology -> Rector						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. Piotr Rutkowski, prof. UG				
	Teachers						
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	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	30		2.0		18.0	50
Subject objectives	- Understand the causes and directions of environmental degradation and know how to protect components of inanimate nature.- To learn the basics of nature and environmental protection law.- To know the forms and methods of nature protection.- Understanding the problems of nature and environmental protection						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[BIOLL3_W07] knows the development of biology as a science, its connections with other disciplines and the principles of using biological knowledge in the economy and social life, including ways that are entrepreneurial						
	[BIOLL3_W05] has advanced knowledge of experimental methods, laboratory and field techniques, and the principles of planning and conducting biological research						
	[BIOLL3_K01] is ready to critically evaluate her/his biological knowledge and continuously update and develop it, taking into account scientific advances and the needs of practice						

Subject contents	History of human impact on the environment. Exhaustible and inexhaustible resources of nature. Water - resources, pollutants, sources of pollution, methods of protection. Air - composition of the atmosphere, air pollutants and related phenomena (acid rain, smogs, ozone hole, anthropogenic greenhouse effect), methods of protecting the air from pollution. Soil degradation and protection of soil resources. Waste management. Use of inexhaustible sources of energy. Monitoring of the environment in Poland. Strategy of sustainable development. Basic legal acts and international conventions on nature and environment protection. Organization of nature protection in Poland and the European Union. Forms of exploitation of living nature. Causes of extinction of plant and animal species. Species protection, red lists and books. The problem with expansive and invasive species. Area-based protection. Natura 2000 network as a form of nature conservation. Conservation of genetic, species and biocenotic diversity. Methodology of protection of species, biocenoses and biotopes based on examples from the Gdansk Pomerania region.		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	final exam	51.0%	100.0%
Recommended reading	Basic literature	1. Dobrzańska B., Dobrzański G., Kielczewski D. 2008. Ochrona środowiska przyrodniczego. Wyd. Nauk. PWN. 2. Symonides E. 2007. Ochrona Przyrody. Wyd. UW. 3. Popkiewicz M. 2012. Świat na rozdrożu Wyd. Sonia Draga 4. Popkiewicz M., Kardaś A., Malinowski Sz. 2018 . Nauka o klimacie. Wyd. Sonia Draga	
	Supplementary literature	1. Chelmiński W. 2002. Woda zasoby, degradacja, ochrona. PWN. 2. Craig J.R., Vaughan D. J., Skinner B. J. 2003. Zasoby Ziemi. PWN. 3. Mannion A. M. 2001. Zmiany środowiska Ziemi. PWN. 4. Rosik-Dulewska Cz. 2008. Podstawy gospodarki odpadami, PWN. 5. Pullin A.S. 2012. Biologiczne podstawy ochrony przyrody. PWN, Warszawa. 6. Fudali E. 2009. Antropogeniczne zmiany w ekosystemach. UWP, Wrocław.	
	eResources addresses		
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

Document generated electronically. Does not require a seal or signature.