

Subject card

Subject name and code	Tutorial I, PG_00189368						
Field of study	Mathematical Modeling and Data Analysis						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2026/2027		
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		1.0		
Learning profile	academic		Assessment form		credit		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor		dr Iwona Krzyżanowska				
	Teachers		dr Iwona Krzyżanowska				
Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	10.0	0.0	0.0	0.0	10
	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	10		0.0		15.0	25
Subject objectives	• Familiarizing students with the university structure and the roles of individual units • Providing knowledge of student rights and responsibilities • Familiarizing students with the basics of academic etiquette and communication with staff • Familiarizing students with university resources • Highlighting the importance of caring for mental well-being and coping with the stress of studying • Familiarizing students with learning and time management techniques • Developing effective teamwork skills and developing the competencies necessary for collaborative planning • Developing skills in developing and presenting content (e.g. promotional materials) • Developing students' general skills in logical reasoning and rigorous thinking						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[MMiADL3_K04] is ready to think and act in an entrepreneurial and responsible manner and to initiate, coordinate and participate in projects for the social environment and the public interest.	the student is ready to design and work on projects for the faculty and university (e.g. those popularizing science)	[SK2] presentation/project/paper/report
	[MMiADL3_U12] is able to work in a team, plan and organize such work	the student is able to function at the university, cooperate in a group in the implementation of projects and participate in assigning roles and planning work	[SU8] observation of student's independent or team work
	[MMiADL3_U10] is able to talk about mathematical issues, and issues related to mathematical modeling and data analysis, in understandable language, present and evaluate different opinions and positions and discuss them	the student is able to use strict reasoning and precisely formulate arguments	[SU1] oral statement/conversation/discussion
	[MMiADL3_K01] is ready to acquire knowledge in order to solve cognitive and practical problems related to the field of mathematics and to use the opinions and assistance of experts	the student is ready to work on tasks related to mathematics (e.g. popularization tasks), use literature	[SK8] observation of student's independent or team work
Subject contents	• Introduction to studying. Academic etiquette and communication. University resources. • Activating methods of intellectual work. Learning techniques. • Time management methods. Mental well-being and stress management. • Differences between school mathematics and higher mathematics. • Group projects, popularization of science		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	51.0%	70.0%
	Activity	51.0%	30.0%
	Observation of student attitude	51.0%	0.0%
Recommended reading	Basic literature	• Locke E.: Jak uczyć się efektywnie. Metody i motywacja, Poznań 2009 • Kuźnar A., Towalski R.: Wprowadzenie do metodyki studiowania Podręcznik dla studentów Szkoły Głównej Handlowej w Warszawie, SGH Oficyna Wydawnicza, Warszawa 2020 • Pólya G.: Jak to rozwiązać?, Wydawnictwo Naukowe PWN 2009	
	Supplementary literature	• Brześciwicz Z.: Superpamięć: jak uczyć się trzy razy szybciej, Warszawa 1996 • Buzan T.: Pamięć na zawołanie metody i techniki pamięciowe, Łódź 2005 • Dryden G., Vos, J.: Rewolucja w uczeniu się, Poznań 2000 • Spitzer M.: Jak uczy się mózg, Warszawa 2007 • Ciechanowska D.: Proces kształcenia akademickiego studenta, Uniwersytet Szczeciński 2009 • Czerniawska E., Ledzińska M.: Jak się uczyć? Bielsko-Biała 2007 • Szurawski M.: Pamięć. Trening interaktywny, AHA, Kraków 2007 • Zaporozec G.I.: Metody rozwiązywania zadań z analizy matematycznej, WNT 1976	
	eResources addresses	Basic https://mfi.ug.edu.pl/studenci/niezbednik-studenta-1-roku - A must-have for first-year students at the Faculty MFI UG https://ug.edu.pl/niezbednik-studenta-1-roku - A must-have for first-year students at the Faculty MFI UG https://cor.sgh.waw.pl/bitstream/handle/20.500.12182/993/085_Metodyka%20studiowania_Kuzniar_Towalski%3Asequence=2&isAllowed=y - Kuźnar A., Towalski R.: Wprowadzenie do metodyki studiowania Podręcznik dla studentów Szkoły Głównej Handlowej w Warszawie, SGH Oficyna Wydawnicza, Warszawa 2020	
Example issues/ example questions/ tasks being completed	not applicable		
Work placement	Not applicable		

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