

**Subject card**

<b>Subject name and code</b>	MSc workshop II (Laboratory classes), PG_00201214						
<b>Field of study</b>	Physical geography and geoinformation						
<b>Date of commencement of studies</b>	October 2026	<b>Academic year of realisation of subject</b>			2027/2028		
<b>Education level</b>	Master's studies	<b>Subject group</b>			Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	2	<b>Language of instruction</b>			Polish		
<b>Semester of study</b>	3	<b>ECTS credits</b>			5.0		
<b>Learning profile</b>	academic	<b>Assessment form</b>			credit		
<b>Conducting unit</b>	Climate Research Laboratory -> Department of Physical Oceanography and Climate Research -> Faculty of Oceanography and Geography -> Rector						
<b>Name and surname of lecturer (lecturers)</b>	Subject supervisor		dr Mirosława Malinowska				
	Teachers						
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	0.0	0.0	60.0	0.0	0.0	60
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	60		20.0		45.0	125
<b>Subject objectives</b>	<p>The primary aim of the Msc Workshop is to provide academic and technical support to students in the preparation of their Masters thesis, as well as to monitor their progress on an ongoing basis. The topic of the Masters thesis, selected from a list of proposals during the first semester of study as part of the Discussion classes course, relates to one of the subject areas covered by the programme:</p> <ul style="list-style-type: none"> <li>- Quaternary geomorphology and geology,</li> <li>- hydrology, limnology and water protection,</li> <li>- meteorology and climatology,</li> <li>- geoinformation and</li> <li>- interdisciplinary topics combining selected aspects of the above.</li> </ul> <p>The specific aim of the Msc Workshop II course is to provide substantive and technical assistance to seminar participants in carrying out the advanced stages of preparing their Masters thesis, covering the main stage of analysing the research material and the general interpretation of the results obtained.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[GFGMU2_U09] is able to plan individually or in a group and perform specialized field measurements and observations of processes and phenomena occurring in the natural environment and interpret their results	Can plan independently or cooperating in a group and perform specialized laboratory measurements and make observations of processes and phenomena occurring in the natural environment and interpret their results, curriculum content: 1-3.	[SU3] text preparation/written work
	[GFGMU2_W06] knows and understands in a deepened extent conceptual apparatus of physical geography and geoinformation, selected Polish and foreign literature on physical geography and principles of preparing and editing scientific texts	He knows and understands the advanced conceptual apparatus of physical geography and geoinformation, selected Polish and foreign language literature on physical geography, as well as the principles of preparing and editing scientific texts, program content: 1-3.	[SW2] presentation/project/paper/report
	[GFGMU2_U07] is able to efficiently perform, present and critically interpret the results of individual or group research, using a properly understood cause-and-effect sequence of the applied research procedure, visualizing the results of spatial data analysis and reliably documenting own contribution to the conducted procedure	Able to efficiently perform, comprehensibly present and discuss the results of their own research using a properly understood cause-and-effect sequence of the applied research procedure, skillfully visualizing the results of spatial data analysis and credibly documenting their own contribution to the conducted procedure, curricular content: 1-3.	[SU1] oral statement/conversation/discussion [SU3] text preparation/written work
	[GFGMU2_W05] knows and understands principles of planning field and laboratory research using techniques and research tools used in geomorphology, hydrology and climatology, as well as principles of operating equipment and devices used to obtain and process digital geographic information in accordance with health and safety principles	Knows and understands the principles of planning field and laboratory research using techniques and research tools used in geomorphology, hydrology and climatology, as well as the principles of operating equipment and devices for the acquisition and processing of digital geographic information, curriculum content: 1-3.	[SW3] text preparation/written work
	[GFGMU2_U03] is able to effectively use selected scientific literature in the field of physical geography and geoinformation, both in Polish and English	Can effectively use skillfully selected for the purpose of application of scientific literature in the field of the research problem assigned for implementation, program content: 1-3.	[SU3] text preparation/written work
	[GFGMU2_K03] is ready to accepting responsibility for group work assuming various roles in it, participating in preparation of scientific projects, taking responsibility for the equipment and safety rules, active developing of professional competences and knowledge in Earth and environmental sciences and geoinformation, including interdisciplinarity, as well as developing the principles of professional ethics, respecting copyright rules	He is ready to actively expand professional competence and update knowledge in earth and environmental sciences and geoinformation enriching them with an interdisciplinary dimension, observing and developing the principles of professional ethics, including the observance of copyrights in his own and others' activities, curricular content: 1-3.	[SK3] text preparation/written work [SK8] observation of student's independent or team work
	[GFGMU2_U02] is able to precisely and appropriately use terminology in the field of physical geography and geoinformation in oral statements and written works	Can proficiently and appropriately apply the terminology of physical geography and geo-information in oral statements and written works, curriculum content: 1-3	[SU1] oral statement/conversation/discussion [SU3] text preparation/written work
	[GFGMU2_U01] is able to find, select and critically evaluate sources of information about the research problem to be implemented	Able to find, select and critically evaluate sources of information on the research problem assigned for implementation, program content: 1-3.	[SU3] text preparation/written work

Subject contents	<p>The course covers:</p> <ul style="list-style-type: none"> <li>- completion of the research data collection process,</li> <li>- commencement of laboratory and/or analytical work on the research data,</li> <li>- verification of the methodological soundness of the analytical methods employed,</li> <li>- selection of methods for visualising the analysis results,</li> <li>- the students monitoring of the literature review,</li> <li>- commencing the stage of general interpretation of the analysis results obtained, including gathering opinions and comments from experts,</li> <li>- finalising the introductory chapters of the Msc Thesis,</li> <li>- discussing the technical and ethical aspects of applying AI techniques in specific cases of analysis conducted as part of the Msc Thesis.</li> </ul> <p>There can be individual aspects of the course dependent on the topic of the Msc Thesis.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
Recommended reading	<p>Basic literature</p> <p>Supplementary literature</p> <p>eResources addresses</p>	<p>51.0%</p>	<p>100.0%</p> <p>Plit F., 2007, How to write undergraduate and graduate papers in geography, UW, Warsaw (in Polish).Weiner J., 2001, Technique of writing and presenting natural science papers, PWN Scientific Publishers, Warsaw (in Polish).</p> <p>Supplementary literature adapted to the individual topic of the master's thesis performed.</p>
Example issues/ example questions/ tasks being completed	<p>Prepare a presentation of preliminary research results Prepare in writing the preliminary chapters of the thesis</p>		
Work placement	Not applicable		

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