Attatchment no. 4

SUBJECT/MODULE SYLLABUS*

1.	Subject/module name Geoarchaeology
2.	Discipline archaeology
3.	Lecture language Polish
4.	The entity conducting subject Institute of Archaeology
5.	Subject/module code 22-AR-S1-02-Geoarch
6.	Type of subject/module *(obligatory or optional)* obligatory
7.	Field of study (specialization)* archaeology
8.	Level of studies *(1st degree*, 2nd degree*, long-cycle master's studies*, name of the Doctoral College*)* 1st degree
9.	Year of studies *(if applicable*) 1st year
10.	Semester *(winter or summer)* summer
11.	Form of classes and number of hours (including number of hours of online classes*) lecture 22 hours, seminar 8 hours
12.	Prerequisites in terms of knowledge, skills and social competences for the subject/module knowledge of field and laboratory research methods in the field of archaeology, general knowledge of prehistory and later periods, basics of physical geography and geology, methods of reconstructing changes in the natural environment
13.	Learning objectives for the subject The aim of the course is to present various methods in the field of earth sciences (sedimentological, geomorphological, mineralogical, geochemical, geophysical) used in the study of archaeological sites and to present methods of explaining the formation of archaeological sites in various sedimentary environments.
14.	Program content: Lecture:

	1. Introduction to geoarchaeology: course framework, presentation of selected literature 2. Geological context and archeology: basic concepts, subject of research, sources of archeology and geology, history of geoarchaeology 3. Towards geology: history of the late Quaternary (Middle Pleistocene-Holocene): chronology, stratigraphy, sediments and forms, climate changes, bioenvironment 4. Formation of archaeological sites: systemic and archaeological context, stages of the formation of an archaeological site 6. River environment and its sediments: methods of sediment research, types of sediments and types of layering, river valleys, the most important transformations at the end of the Quaternary 7. Examples of archaeological sites in the environment of river valleys: processes deforming sediments, processes affecting the state of preservation of stone products, bone diagenesis (basics of taphonomy), mechanism of site formation in the context of a river valley, examples 8. Aeolian environment: research methods, the most important types of aeolian sediments, loess environment and soils 9. Examples of archaeological sites in the aeolian environment: processes destroying the surfaces of the sites, processes affecting the arrangement and state of preservation of stone products, bone diagenesis in the aeolian environment, mechanism of site formation 10. Lake sediments: research methods, most important types of sediments (2h) 11. Lake environment, karst and pseudokarst environment, and archaeology Classes: Methodology of field research of archaeological sites using geoarchaeological methods (8 hours)

	Assumed learning outcomes	Appropriate directional symbols learning outcomes
	Knows the basic concepts and terminology used in archaeology and other humanities, especially history, cultural anthropology, selected natural sciences and earth sciences with which archaeology cooperates	K_W02
	Has structured methodological knowledge and knowledge of theories used in archaeology and in various directions of archaeological, archaeological-natural and natural research	K_W03
	Has basic knowledge of the main directions of development and the most important new achievements in the fields of science and scientific disciplines relevant to archaeology	K_W06
	Is able to search, analyze, evaluate, select and use information using various sources and methods	K_U01
	Has basic skills in: - formulating scientific problems and analyzing them by selecting appropriate research methods and tools, - development and presentation of research results, - solving problems in scientific fields and disciplines relevant to the field of study	K_U02
	Is able to communicate at a basic level, in Polish and a foreign language, with specialists in scientific fields and disciplines relevant to the field of study	K_U07

	Has the ability to work in a team, solving simple problems in the field of archaeological research and presenting their results, using instructions and procedures developed for the team	K_U13
	Understands the need for lifelong learning	K_K01
	Is able to cooperate and work in a research team, including those conducting excavations and laboratory tests	K_K02
	Is able to appropriately determine priorities for the implementation of tasks specified by himself or others	K_K03
	Appreciates the role of the humanities, related and cooperating sciences in shaping social bonds at the local and supra-local level	K_K08
15.	Required and recommended literature (sources, studies, textbooks, etc.) Required literature: Brown A.G. 1997. Alluvial geoarchaeology. Floodplain archaeology and environmental change, Cambridge: Cambridge University Press. Goldberg P., Macphail R.I. 2006. Practical and theoretical geoarchaeology, Malden: Blackwell Publishing. Lowe J.J., Walker M.J.C. 1997. Reconstructing Quaternary Environments, London: Routledge. Recommended literature: Herz N., Garrison E.G. 1998. Geological methods for archaeology, Oxford: Oxford University Press. Renfrew C., Bahn P. 2002. Archeologia. Teorie, metody, praktyka, Warszawa: Prószyński i S-ka.	
16.	Methods of verifying the assumed learning outcomes: exam, passing field exercises	
17.	Conditions and form of passing individual components of the subject/module: - checking attendance and progress in the scope of classes, - exam (written or oral)	

18.	Student/PhD student workload	
	the form of carrying out classes by the student*/doctoral student*	the number of hours allocated to carry out a given type of classes
	classes (according to the study plan) with the instructor: - lecture: - seminar:	 22 8
	student/doctoral student's own work (including participation in group work), e.g.: - preparation for classes - reading the indicated literature: - preparation for tests and exam	 20 30 40
	Total number of hours	120
	Number of ECTS points (*if required*)	4

(T) – implemented in a traditional way
(O) – implemented online

* remove unnecessary