

COURSE OF DOCTORAL STUDIES

Course title	Field of science (branch) code	University / Faculty	Institute / Department
Quaternary Interglacials and investigation methods	Natural Sciences (Geology) N 005	Vilnius University / Faculty of Chemistry and Geosciences	Institute of Geosciences /
Study methods	Number of credits allocated	Study methods	Number of credits allocated
Lectures		Seminars	
Individual work	9	Consultations	
Course annotation			
<p>Course objective – introduce students to principles of the Quaternary stratigraphy, methods of investigation of interglacial sediments and possibilities to reconstruct interglacial environmental conditions according to received data. Students will get knowledge about criteria of the Quaternary Interglacial stratigraphy, characteristic sediments of interglacial and methods of investigation. Methods for the reconstruction of sedimentological environment (e.g. geochemical, sedimentological) will be reviewed. Students will get knowledge about micropaleontological methods (e.g. palynological, palaeocarpological, diatom, Mollusca), the main information about methodology of the sediment preparation, analysis of samples, presentation and interpretation of results, advantages and disadvantages of methods for reconstruction of the interglacial environment and climate.</p>			
Required readings			
<p>Pillans. B., Gibbard P. 2012. The Quaternary period. In: Gradstein F.M., Ogg J.G., Schmitz M.D., Ogg G.M. (eds.). The Geologic time scale. Elsevier . 979-1010.</p>			
<p>Oldfield F. 2005. Environmental changes. Cambridge University Press. 363 p</p>			
<p>Oldfield F., Siroko F., Claussen M, Sánchez Goñi M.F., Litt T. (eds.). 2007. The climate of past interglacials. Amsterdam, Elsevier. 622 p.</p>			
Consulting lecturers Name, surname	Degree	The most important works in the field of science (branch) have been published during the last 5 years	
Giedrė Vaikutienė	Dr.	<p>Moskalewicz D., Szczuciński W., Mroczek P., Vaikutienė G. 2020. Sedimentary record of historical extreme storm surges on the Gulf of Gdańsk, Baltic Sea. Marine Geology, 420. 106084.</p> <p>Druzhinina O., Kublitskiy Y., Stančikaitė M., Nazarova L., Syrykh L., Gedminienė L., Uogintas D., Skipitytė R., Arslanov K., Vaikutienė G., Kulkova M., Subetto D. 2020. The Late Pleistocene-Early Holocene palaeoenvironmental evolution in the SE Baltic region: a new approach based on chironomid, geochemical and isotopic data from Kamyshovoe Lake, Russia. Boreas, 49. 544-561</p> <p>Spiridonov A., Vaikutienė G., Stankevič R., Druzhinina O., Šeirienė V., Subetto D., Kublitskiy J., Stančikaitė M. 2021. Response of freshwater diatoms to cold events in the Late Pleistocene and early Holocene (SE Baltic region). Quaternary International, 589. 112-123. https://doi.org/10.1016/j.quaint.2021.02.017</p>	
Laura Gedminienė	Dr.	<p>Kublitskiy, Y., Kulkova, M., Druzhinina, O., Subetto, D., Stančikaitė, M., Gedminienė, L., Arslanov, K. 2020. Geochemical Approach to the Reconstruction of Sedimentation Processes in Kamyshovoye Lake (SE Baltic, Russia) during the Late Glacial and Holocene. Minerals, 10, 764.</p>	

	<p>Šeiriene, V., Šinkūnas, P., Stančikaitė, M., Kisieliene, D., Gedminienė, L. 2019. Late Middle Pleistocene interglacial sediments from Buivydžiai site, eastern Lithuania: the problem of chronostratigraphic correlation. <i>Quaternary International</i>, 534, 18–29.</p> <p>Gedminienė, L., Šiliauskas, L., Skuratovič, Ž., Taraškevičius, R., Zinkutė, R., Kazbaris, M., Ežerinskis, Ž., Šapolaitė, J., Gastevičienė, N., Šeiriene, V., Stančikaitė M. 2019. The Lateglacial-Early Holocene dynamics of the sedimentation environment based on the multi-proxy abiotic study of Lieporiai palaeolake, Northern Lithuania. <i>Baltica</i>, 32 (1), 91– 106.</p>
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Approved by the doctoral committee of Geology (N 005) on 1 st of December 2022 (No. (7.17 E) 15600-KT-467).
Committee Chairman prof. dr. Sigitas Radzevičius