

COURSE OF DOCTORAL STUDIES

Course title	Field of science (branch) code	University / Faculty	Institute / Department
Geophysical exploration	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	11	Consultations	
Course annotation			
<p>The aim of the subject: to get acquainted with the methods of geophysical prospecting - a field of scientific and practical activity in geological research, dedicated to the solution of various geological tasks, such as the search and exploration of strategic minerals, oil, ores, and detailed geocological studies.</p> <p>Course content: theoretical and methodological foundations of various geophysical prospecting methods, geological structures, and spatial distribution of physical properties of rocks and reflection of geological processes in natural and artificial in excited physical fields, methodology of complex geological interpretation of geophysical data, principles of creating physical-geological models, possibilities of geophysical research methods in solving various problems geological tasks.</p>			
Required readings			
Kearey P., Brooks M., Hill I. An Introduction to Geophysical Exploration III edition. Blackwell Science Ltd, 2002, 262 p.			
Reynolds J. M. An Introduction to Applied and Environment Geophysics, Second Edition. JohnWiley & Sons, 2011, 696 p.			
Telford W. M., Geldart L. P. and Sheriff R. E. Applied Geophysics, second edition. Cambridge University Press, 1991, 770 p.			
Ellis D. V. and Singer J.M. Well Logging for Earth Scientists, second edition. Springer, 2007, 692 p.			
Consulting lecturers Name, surname	Degree	The most important works in the field of science (branch) have been published during the last 5 years	
Nikita Dobrotin	PHD	<p>Buynevich, I. V., Savarese, M., Curran, H. A., Bitinas, A., Glumac, B., Pupienis, D., Koczinski, K., Dobrotin, N., Gnivecki, P., Park Boush, L., and Damušytė, A. 2017. Sand incursion into temperate (Lithuania) and tropical (the Bahamas) maritime vegetation: georadar visualization of target-rich aeolian lithosomes. <i>Estuarine, Coastal and Shelf Science</i>, 195 (5), 69–75.</p> <p>Bitinas, A., Dobrotin, N., Buynevich, I.V., Molodkov, A., Damušytė, A., Pupienis, D., 2018. Coastal dune dynamics along the northern Curonian Spit, Lithuania: toward an integrated data base. <i>Geological Quarterly</i>, 62 (3): 553–562, doi: 10.7306/gq.1435</p> <p>Dobrotin.N. 2018. Disertation "Evolution of the Curonian Spit Dunes". Klaipėdos University.</p> <p>Sarcevičius,S., Stasiulis,S., Dobrotin,N., Latvytė,N., Michelevičius,D., Sederevičiūtė,Š., Šikšnianas,M., Valionienė,O., Urbanavičius,V. 2021. Nusikaltimų pėdsakai neišnyksta: masinės žudynės Panerių miške 1914-1944 metais. Book. Lietuvos istorijos institutas.</p>	

		<p>Sarcevičius,S., Stasiulis,S., Dobrotin,N., Latvytė,N., Michelevičius,D., Sederevičiūtė,Š., Šikšnianas,M., Valionienė,O., Urbanavičius,V. 2021. The traces of crimes do not disappear: mass killings in the Paneriai forest, 1941-1944. Book. Lietuvos istorijos institutas.</p> <p>Bitinas,A., Suzdalev,S., Vaikutienė,G., Žulkus,V., Buchovska,J., Damušytė,A., Danusevičius,D., Daugnora,L., Dobrotin,N., Girininkas,A., Petkuvienė,J., Rimkus,T., Stančikaitė,M. 2022. Lithuanian Baltic Sea Coasts during the Holocene: Sea Level Changes, Environmental Developments and Human Adaptations. BAR Publishing.</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