

## Course Information Sheet

<b>University:</b> Comenius University in Bratislava																	
<b>Faculty:</b> Faculty of Natural Sciences																	
<b>Code:</b> <i>N-mGAF-160/22</i>			<b>Title of Course:</b> Geophysical Methods in Practical Applications														
<b>Form of Study:</b> full-time and/or distance learning																	
<b>Number of contact hours:</b> <b>per week:</b> 3 h <b>per level/semester:</b> 30 h 2 hours lecture and 1 hour seminary per week																	
<b>Number of credits:</b> 3																	
<b>Semester:</b> 4 <sup>th</sup>																	
<b>Degree/Level:</b> 2 <sup>nd</sup> (Master)																	
<b>Prerequisites:</b> No prerequisites are necessary.																	
<b>Grading Policy (Assessment/Evaluation):</b> Grades will be based on the final exam in the form of written test. The course has a standardized grading system which is as follows: A: 100 – 91%, B: 90 – 81%, C: 80 – 73%, D: 72 – 66%, E: 60 – 65%, Fx: 59% and less.																	
<b>Aims and Objectives:</b> This course covers the background and skills needed to understand and apply geophysical methods in geological-geotechnical/environmental prospection, focused on the branch of gravimetry, magnetometry, geoelectrical methods, seismic methods, radiometry and well logging.																	
<b>Syllabus/Indicative Content:</b> Introduction into the methods of applied geophysics, physical foundations of different prospection methods; gravimetry; magnetometry; geoelectrics - DC methods; geoelectrics - EM methods and GPR; reflection seismic method; refraction seismic method; geothermical method; radiometry; well logging; Application of geophysical methods in geological prospection. Application of geophysical methods in the solution of geological and exploration problems, environmental protection and engineering/hydrogeological prospection; Application of geophysical methods in archaeological prospection. Possibilities of geophysical methods are shown on results from real-world case-studies and some selected problems are shown by means of field exercises.																	
<b>Suggested readings:</b> Telford W.M. et al., 1990: Applied geophysics. Cambridge University Press. Milsom J., 2003: Field geophysics. John Wiley and Sons Ltd.																	
<b>Language of Instruction:</b> English																	
<b>Other course information:</b>																	
<b>Grading history</b> Number of evaluated students: 0																	
<table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>FX</th> </tr> </thead> <tbody> <tr> <td>100,0</td> <td>0,0</td> <td>0,0</td> <td>0,0</td> <td>0,0</td> <td>0,0</td> </tr> </tbody> </table>						A	B	C	D	E	FX	100,0	0,0	0,0	0,0	0,0	0,0
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<b>Lecturer/Instructor:</b> Univ.Prof. RNDr. Roman Paštka, PhD., Univ.Prof. RNDr. Miroslav Bielik, DrSc., Assist.Prof. RNDr. Bibiana Brixová, PhD., Assoc.Prof. RNDr. Andrej Mojžeš, PhD., Assist.Prof. RNDr. René Putiška, PhD.,																	
<b>Last update:</b> 24. April 2023																	
<b>Approved by:</b> Univ.Prof. RNDr. Roman Paštka, PhD.																	