

Subject name:/code:	Methods of Non-Invasive Archeology and Landscape Exploration BTR-DK-719A	
Subject coordinator:	Doktori programvezető	
Lecturer(s) of the subject:	Dr. Bertók, Gábor	
Credit number:	10	
Class type	lecture	
Brief subject description:	The course aims to introduce the theoretical and practical foundations of non-invasive archaeology and landscape archaeology. It reviews geophysical, remote sensing, photogrammetric and GIS-based methods applied in modern archaeological research, together with their interpretative potential. Particular emphasis is placed on Hungarian and international case studies.	
Theoretical knowledge to be acquired:	Students will become familiar with the theoretical foundations of non-invasive and landscape archaeology, the principles of remote sensing, photogrammetry, magnetometry and ground-penetrating radar, and the main questions of archaeological landscape interpretation.	
Practical knowledge to be acquired:	Students learn the steps of field data acquisition, digital processing and GIS-based analysis. Through practical examples they gain experience in evaluating data and placing research results in spatial context.	
List of the most important required literature (2–4 pieces) with bibliographical details (author, title, edition or specific pages, ISBN)	<p>Arikan, B., & Olsvig-Whittaker, L. (Eds.). (2023). <i>Landscape Archaeology in the Near East: Approaches, Methods and Case Studies</i>. Oxford: Archaeopress.</p> <p>Bertók Gábor – Gáti Csilla (2014): <i>Régi idők – új módszerek. Roncsolásmentes régészet Baranyában 2005–2013</i>. <i>Archaeolingua</i>, Budapest. ISBN 978-963-9911-53-6</p> <p>Bertók Gábor – Papp Bálint – Visy Zsolt (2013): <i>Eke mentén, csata nyomában: A mohácsi csata kutatásának újabb eredményei</i>. <i>Janus Pannonius Múzeum – Duna-Dráva Nemzeti Park Igazgatóság</i>, Pécs. ISBN 978-963-675-999-5</p> <p>David, B., & Thomas, J. (Eds.). (2013). <i>Handbook of Landscape Archaeology</i>. London & New York: Routledge.</p>	
List of the most important recommended literature (2–4 pieces) with bibliographical details (author, title, edition or specific pages, ISBN)	<p>Lindsay, I. (2023). <i>Free and Low-Cost Aerial Remote Sensing in Archaeology: An Overview of Data Sources and Recent Applications in the South Caucasus</i>. <i>Advances in Archaeological Practice</i>.</p> <p>Gáti Csilla – Bertók Gábor (2016): <i>Távérzékelés és tájrégészet</i>. In: Mester Zs. (szerk.): <i>A régészet módszerei</i>. <i>Archaeolingua</i>, Budapest, pp. 233–252. ISBN 978-615-5766-02-7</p> <p>Campana, S. & Piro, S. (eds.) (2009): <i>Seeing the Unseen – Geophysics and Landscape Archaeology</i>. CRC Press, London. ISBN 978-0415413407</p>	
Theory to practice ratio	Number of theory lessons: 2	Number of practical lessons:

Applied teaching methods:	The class consists of richly illustrated lectures and a joint discussion of certain questions.
Form of evaluation:	three-level assessment
Evaluation criteria:	The evaluation is based on an exam based on the course material and the assigned literature, and the students' class activity is also an important aspect.
Contribution of the subject to the acquisition of competence elements as defined in the Training and Outcome Requirements Elaborate on how competence elements specified in the Training and Outcome Requirements are/may be achieved (<i>Note: do not simply copy the competence elements from the Training and Outcome Requirements</i>)	In addition to lexical knowledge, the subject develops the ability to analyze archaeological material, the way of thinking, and promotes complex thinking and the combined use of methodologies from different source areas. The scientific methods and complex perspective acquired here can be utilized in other fields as well.