

Tantárgy neve: Research Methodology for Technicians	Tantárgy NEPTUN kódja: GEVGT470-a
Tantárgyfelelős (név, beosztás, tud. fokozat): Dr. Jármái Károly, egyetemi tanár, DSc	
tanóra típusa és száma: előadás (2)	
számonkérés módja (kollokvium / gyakorlati jegy / egyéb): kollokvium	
tantárgy tantervi helye (ősz/tavaszi félév): ősz és tavaszi félév	
előtanulmányi feltételek (ha vannak): -	
A tárgy feladata és célja:	
An introduction to research methodology. To familiarise students with the importance and applications of scientific research. To show how data collection in technical fields can be designed. To familiarise students with the various scientific literature databases. To introduce the possibilities and requirements for publication.	
Tantárgy leírása:	
General research methodology basics. Sources of knowledge. The concept, meaning and application of scientific research. Difficulties of scientific research. The scientific research process. Choosing a topic, defining the research problem. Exploring the background to research, reviewing literature and other sources. Developing a conceptual framework for research - conceptualisation. Formulating the objectives of the research. Designing the data collection. Familiarisation with the various scientific literature databases: Web of Science, Scopus, Google Scholar, ProQuest, ScienceDirect, SpringerLink, etc. Measurement methods and data types. Quantitative research methods. Qualitative research methods. Quantitative and qualitative research methods. Journal classification system, content and format requirements. Case studies.	
Kötelező irodalom:	
<ol style="list-style-type: none"> 1. Ranjit Kumar: Research Methodology: A Step-by-Step Guide for Beginners, Fourth Edition, SAGE Publishing, https://study.sagepub.com/kumar4e 2. Shanti Bhushan Mishra, Shashi Alok: Handbook of Research Methodology, Educreation Publishing, 2011, 146 p. https://books.google.hu/books?id=O54wDwAAQBAJ&printsec=frontcover&hl=hu&source=gs_b_s_ge_summary_r&cad=0#v=onepage&q&f=false 	
Ajánlott irodalom:	
<ol style="list-style-type: none"> 1. Uwe Flick: Introducing Research Methodology: A Beginner's Guide to Doing a Research Project, Second Edition, Los Angeles: Sage. https://irigasi.info/wp-content/uploads/2021/04/INTRODUCING-RESEARCH-METHODOLOGY-UWE-FLICK.pdf 2. Lucienne T.M. Blessing, Amaresh Chakrabarti: DRM, a Design Research Methodology, Springer Nature, 2009, https://link.springer.com/book/10.1007/978-1-84882-587-1#toc 	