

Tárgytematika / Course Description
Methodology of research**N_DMA02****Tárgyfelelős neve /****Teacher's name:** dr. Varga Zoltán**Félév / Semester:** 2024/25/1**Beszámolási forma /****Assesment:** Vizsga**Tárgy heti óraszám /****Teaching hours(week):** 0/0/0**Tárgy féléves óraszám /****Teaching hours(sem.):** 14/0/0**OKTATÁS CÉLJA / AIM OF THE COURSE**

The aim of teaching research methodology is to introduce students to the theoretical, practical, and methodological issues of scientific research. Students acquire up-to-date knowledge of the major issues of scientific theory and research methodology and the forms of scientific activity and get to know the conceptual and methodological tools of their own scientific field. They recognize the methods to be used to solve problems, they are able to plan the research and carry it out. They learn the essential steps of writing scientific publications. They can distinguish between scientific and non-scientific work and recognize pseudo-scientific activity when appropriate. They are aware of the ethical rules for preparing scientific publications, as well as the important parameters of scientometrics.

TANTÁRGY TARTALMA / DESCRIPTION

1	The importance and history of science and research methodology
2	Comparative analysis of everyday and scientific knowledge
3	Parallel examination of theoretical and empirical knowledge
4	Explanation and prediction in science
5	The practice of scientific research, the basic steps of scientific knowledge
6	Planning and conducting scientific research
7	Basic rules of scientific literature, use of internet databases; searching for technical articles and references, query techniques
8	Types of scientific and non-scientific publications, conditions of publishing
9	Strategies for choosing the right journal(s) and publishing there
10	Ethical issues of scientific research and publishing
11	Writing scientific publications (from title to references, content and form requirements)
12	Scientometrics, the measurement of scientific performance; interpretation of the most widely used performance indicators, their advantages, and disadvantages (impact factor, citations, Hirsch index, etc.)

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Written examination, graded on a 5-point scale.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Harari, Y.N. (2015) Sapiens: A Brief History of Humankind. Vintage Books, London, UK.
Walliman, N. (2011) Research Methods: The Basics. Routledge, London, UK, New York, NY.

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL

Ireland, C. (2010) Experimental Statistics for Agriculture and Horticulture, CABI, Wallingford, UK.
Popper, K. (2002): The Logic of Scientific Discovery. Routledge, London, UK, New York, NY.