SD UP LUBLIN 2021/2022	SD_002
Course Title	Methodology of research
Language of lecture	English
Type of course	Mandatory
Year of study	I
Semester of study	1
Name of lecturer – academic degree	Prof. Dr hab. Jerzy Demetraki-Paleolog
Department/ scientific discipline	Dept. of Invertebrate Ecophysiology and Experimental Biology, Faculty of Environmental Biology
Aim of the course	Our aim is to show the main principles of methodology of the natural-science and research, and then, to develop a critical, but constructive, approach to scientific laws, theories, inference rules, and methods which are used in biological research
Course contents	The main principles of epistemology, the specificity of the process of both cognition and interpretation in natural and agricultural sciences will be presented, as well as the main methodological views that relate to these issues. We will consider various ways of verifying the truth and legitimacy of the scientific ideas, hypotheses, and theories, as well as ways of assessing credibility of results. We will analyse knowledge-creating processes, including inference, and the risks resulting from application of biotechnology. The attention will be paid to the critical approach to research results and to various types of statements and conclusions. We will consider inference in experimental versus formal sciences and discuss elements of the Science Studies.
References	<ul> <li>I. Niiniluoto, Matti Sintonen, Jan Wolenski; Handbook of Epistemology. Springer Science &amp; Business Media, 31 mar 2004 – 1052p</li> <li>2.R.L. Kirkham; Theories of truth: a critical introduction. MIT Press, Cambridge, MA, 1992.</li> </ul>
Teaching methods	Lectures, polemics, discussions, answering letters, etc. Classes may be conducted using distance learning methods and techniques.