SUBJECT:	**Methodology of Quantitative Research in Social Sciences**		
HOURS:	18	ECTS:	3

Name/title of the author:	**Adam Sagan, prof. UEK**
Course Description:	This is an introductory course of general methodology of quantitative research in social and economic sciences. It aims to prepare researchers to understand basic approaches to scientific problems formulation, types of research designs, conceptualization of research problems, built conceptual and empirical models.
Learning Outcomes (Skills and knowledge):	Upon successful completion of the course the student is expected to: - gain knowledge of relevant methodological terminology, - be aware of problems with development of various research designs and particular steps in scientific problem formulation and solving. - The student will be conceptually prepared to use, in a proper manner, quantitative research methods and statistical tools of data analysis. - Additionally, he/she would be better prepared to understand and critically evaluate the content of scientific papers in the field of social sciences.
Course Content: Methods of Instruction:	1/ Types of reasoning. Deduction, induction and abduction. Genetic, functional, teleological explanation. Postdiction and prediction in social sciences. Explanation in economic schools - positive economics, behavioral economics, evolutionary economics. Austrian method. 2/ Causality and counterfactuals. Causal and correlational research. Experimental and quasi-experimental designs. Interrupted time-series designs. Regression discontinuity designs. Randomized experiments. Generalized causal inference. External and internal validity 3/ Problem definition and hypothesis formulation. Constructs and indicators. Latent and manifest variables. Moderators and mediators. Control and confounding variables. 4/ Introduction to structural and path modelling in social and economic sciences. Structural models and endogeneity. Specification and misspecification of model. Empirical SEM models. Goodness of fit and parameter interpretation. Model respecification. Lecture, critical analysis of scientific papers in academic journals (case study)
Assessment policy (examination):	Review of selected academic scientific papers published in leading economic/management journals
References:	1/ W.R. Shadish, T.D. Cook, D.T. Campbell, Experimental Quasi-experimental Designs for Generalized Causal Inference, Wadsworth 2002 2/ D. Ethridge, Research Methodology in Applied Economics, Blackwell 2004 3/ J. W. Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, Sage 2009 4/ B. L. Weathington, Ch. J. L. Cunningham, D. J. Pittenger, Research Methods for the Behavioral and Social Sciences, Willey 2010

	5/ R. Kline, Principles and Practice of Structural Equation Modeling, Guilford Press 2011 (ch.1-10, 13)