

Type and level of studies: PhD				
Title of the study program: Economics, Business Management, Statistics				
Subject title: Methodology of Scientific Research 2-D				
Subject code: DMNI				
Number of ECTS: 9				
Subject status (Compulsory / Elective): Elective				
Teacher/s (Name, last name): Branislav Boričić, Siniša Zarić, Mirjana Ilić				
Number of active teaching lessons:				Other lessons
Lectures:	Practice classes:	Other forms of teaching:	Study research work:	
Prerequisite: Methodology of Scientific Research 1D				
Subject objective: To enable students to acquire skills in the methods of general logic, methodology and research, as required for their use in economics-, business- and statistics-based subjects. To prepare students for further units in research and argumentation.				
Subject outcome (gained knowledge): This course develops advanced logical and methodological methods and will emphasize their applications to problems in economics, statistics, management and related areas, and also demonstrates further applications in economics.				
Subject content/structure: GENERAL METHODOLOGY AND LOGIC. Scientific theory; Axiomatic method; Induction and inductive definition; The nature of proof; Deduction relation; Independence of axioms; Consistent and inconsistent theories; Truth and proof; Completeness; Aristotle two-valued principle; Paradoxes and logical errors; Indirect argumentation; Example and counterexample – proof and refutation; Decision making; Weighted voting system, vetoing and dictatorship. METHODOLOGY OF ECONOMICS. The hypothetico-deductive model; Statistical inference; Norms versus actual practice; From Popper's falsificationism to the new heterodoxy; Empiricism-Ultraempiricism-Apriorism-Operationalism; Positive and normative economics; The rationality postulates; The logic of preference; Independence of rational choice axioms; Arrow-Sen social choice theory; Possibility and impossibility phenomena; Existence of utility function; Existence of general equilibrium.				
Teaching methods: practice classes, other forms of teaching, study research work				
Grading (maximum number of points 100)				
Pre-examination obligations		Points	Final exam	Points
Activities during lectures			Written exam	
Practice lessons			Oral exam	
Colloquium/a			
Semester papers				
Literature:				
No.	Author	Title	Publisher	Year
	I. Lakatos	Proofs and Refutations	The British Journal for the Philosophy of Science XIV, pp. 1-25, 120-139, 221-245, 296-342.	1963
	P. C. Fishburn	The Theory of Social Choice	Princeton University Press	1973
	A. D. Taylor	Mathematics and Politics - Strategy, Voting, Power and Proof	Springer, Berlin	1995

	M. Blaug	The Methodology of Economics: Or, How Economists Explain	Cambridge University Press, Cambridge	1992
	B. Boričić	Logic and Proof	Ekonomski fakultet, Beograd	2011
	M. Cohen, E. Nagel	An Introduction to Logic and Scientific Method	George Routledge and Sons, London	1934
	S. Dow	Economic Methodology - An Inquiry	Oxford University Press Inc, New York	2003
	M. Friedman	The Methodology of Positive Economics, in Essays In Positive Economics	Univ. of Chicago	1966