

Course title: Fuzzy Systems		
Lecturer(s): Ivana Štajner-Papuga		
Status: (obligatory/elective) elective		
ECTS: 7		
Requirements: none		
Learning objectives Introduction to the theory of fuzzy sets and systems and its role in modeling of fuzzy data. Acquiring fundamental knowledge in fuzzy statistical analysis and estimation.		
Learning outcome A successful student will be able to make a critical assessment of a given problem and apply methods of fuzzy statistics.		
Syllabus <i>Triangular norms, fuzzy sets, fuzzy numbers, fuzzy relations, fuzzy arithmetic (α-cuts, extension principle), fuzzy random sets, fuzzy statistical analysis and estimation, tests of hypothesis, applications</i>		
Recommended literature H. T. Nguyen, B. Wu, Fundamentals of Statistics with Fuzzy Data, Springer, 2006. H. Michael, Applied fuzzy Arithmetic – an introduction with engineering applications, Springer, 2005. K. E. Peter, P. Mesiap, E. Pap, Triangular norms, Kluwer Academic Publishers, 2000. E. Pap, Fazi mere i njihova primena, Univerzitet u Novom Sadu, PMF Novi Sad, 1999.		
Weekly teaching load	Lectures: 2	Student research:
Teaching methodology		
Grading method (maximal number of points 100) term paper 60 points, exam 40 points		