

Course title: Homogeneous structures 2 (ID025)		
Lecturer(s): Mašulović M. Dragan, Dolinka V. Igor		
Status: elective		
ECTS: 7		
Requirements: Homogeneous structures 1 (ID024)		
Learning objectives Introducing students to some advanced properties of the theory of countable homogeneous structures.		
Learning outcome At the end of the course, each successful student shall be able to examine and prove certain advanced properties of countable homogeneous structures.		
Syllabus Automorphism groups. The Polish group topology. Abstract group structure of automorphism groups. Simple groups. Small index property. Reducts. Structural Ramsey theory. Constraint satisfaction. Variants of homogeneity.		
Recommended literature 1. W. Hodges, <i>A shorter model theory</i> , Cambridge University Press 2002 2. S. Hedman, <i>A first course in logic</i> , Oxford Texts in Logic 1, Oxford University Press, 2008 3. P. J. Cameron, <i>Oligomorphic permutation groups</i> , London Mathematical Society Lecture Note Series 152, Cambridge University Press, 2001 4. D. Macpherson, <i>A survey of homogeneous structures</i> , Discrete Mathematics 311(2011), 1599-1634		
Weekly teaching load	Lectures: 2	Student research: 0
Teaching methodology Theoretical instruction lectures are based on the classical teaching model (blackboard+video beam). Students are obliged to submit a seminar paper. At the oral exam students are expected to demonstrate the in-depth understanding of the material.		
Grading method (maximal number of points 100) Seminar paper 70, Oral exam 30		