

Course Unit Descriptor

<b>Study Programme:</b> Ph.D. in Computer Science			
<b>Course Unit Title:</b> Homogeneous Structures 2			
<b>Course Unit Code:</b> ID025			
<b>Name of Lecturer(s):</b> Dragan Mašulović, Igor Dolinka			
<b>Type and Level of Studies:</b> Doctoral Academic Degree			
<b>Course Status (compulsory/elective):</b> Elective			
<b>Semester (winter/summer):</b> Summer			
<b>Language of instruction:</b> Serbian (primary), English (secondary)			
<b>Mode of course unit delivery (face-to-face/distance learning):</b> Face-to-face			
<b>Number of ECTS Allocated:</b> 7			
<b>Prerequisites:</b> None			
<b>Course Aims:</b> Introducing students to some advanced properties of the theory of countable homogeneous structures.			
<b>Learning Outcomes:</b> At the end of the course, each successful student shall be able to examine and prove certain advanced properties of countable homogeneous structures			
<b>Syllabus:</b> 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.			
<b>Required Reading:</b> 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 D. Macpherson, <i>A survey of homogeneous structures</i> , Discrete Mathematics 311(2011), 1599-1634			
<b>Weekly Contact Hours:</b> 2	<b>Lectures:</b> 2	<b>Practical work:</b> 0	
<b>Teaching Methods:</b> 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.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Active class participation		written exam	
Practical work		oral exam	30
Preliminary exam(s)			
Seminar(s)	70		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			