

Course Unit Descriptor

Study Programme: Early Childhood Teacher			
Course Unit Title: Visualization of Logical and Mathematical Problems			
Course Unit Code: V-4-2-5-2			
Name of Lecturer(s): Márta Takács, Diana Zita			
Type and Level of Studies: Undergraduate Studies (BA)			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): Summer			
Language of instruction: Hungarian			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face learning			
Number of ECTS Allocated: 2			
Prerequisites: Passed exams in Basic Elements of Mathematical Concepts			
Course Aims: Systematization and getting a deeper knowledge in basic mathematics, sets, operations in sets, elements of logic, combinatorics, relations with the help of classic software tools. The aim is that future early childhood teachers use elementary mathematical terms with certainty with the help of the above mentioned tools.			
Learning Outcomes: Students will be able to conduct practical activities independently in terms of teaching program in mathematics during work with children in nursery school. Students will be able to use classical teaching tools as well as software tools for visualization of mathematical-logical exercises and their solution.			
Syllabus: <i>Theory</i> The role of teaching tools especially software tools in the visualization of mathematical problems. Construction and use of mathematic softwares. Sets and sets of numbers in program packages. Combinatoric games. <i>Practice</i> Processing and presentation of exercises from fields that were elaborated in lectures as well as related exercises in preschool institutions.			
Required Reading: <i>Compulsory:</i> Benedek, András (Ed.) (2013): Digitális pedagógia 2.0, Budapest: Typorex. Takács, Márta (2013): Praktikum a számítógép alkalmazásához a matematikaoktatásban (e-материјал). <i>Optional:</i> Béres, Zoltán (2007): Válogatott matematikafeladatok – a szabadkai Magyar Tannyelvű Tanítóképző Kar első évfolyama részére , (одабрана поглавља), Суботица: УФ. Szendrei, Julianna (2005): Gondolod, hogy egyre megy?, Typotex Kiadó, (одабрана поглавља).			
Weekly Contact Hours: 5(75)		Lectures: 3 (45)	Practical work: 2 (30)
Teaching Methods: Lecture, practice, presentation, discussion, presentation, pair and individual work, consultation.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	30

Practical work	20	oral exam	20
Preliminary exam(s)	20		
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			