

Course Unit Descriptor

Study Programme: Elementary Teacher			
Course Unit Title: using Computers in Teaching Mathematics			
Course Unit Code: U-2-2-2-1			
Name of Lecturer(s): Márta Takács, Zsolt Námesztovszky			
Type and Level of Studies: Undergraduate Studies (BA)			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): Winter			
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 Informatics in Education and Mathematics 1 and 2			
Course Aims: Students learn about ways of using computers in teaching mathematics. Except for e-learning, they learn how to use softwares, which make it easier to visualize mathematical problems as well as softwares which make it possible to controll knowledge level.			
Learning Outcomes: Students should use independently e-learning platforms with the help of software administrators. Students will be able to look for newer softwares on the internet and introduce these into mathematics classes.			
Syllabus: <i>Theory</i> Theoretical and methodological basis of e-learning. Visualization of mathematical problems and exercises (for 6-12 years old pupils). Computer as a tool for better reception of curriculum. Computer as a tool in controlling level of knowledge, making and analizing tests. <i>Practice</i> Presentation of basic e-learning platforms, which are available in our region. Elaboration and presentation of exercises for 6-12 years old pupils as well as their solution with the help of program packages.			
Required Reading: <i>Compulsory:</i> Benedek, András (Ed.) (2013): Digitális pedagógia 2.0, Budapest: Typorex. Sárvári, Csaba (2001): Számítógéppel segített matematikaoktatás, Budapest: Iskolakultúra. <i>Optional:</i> Marinčič, Dragan – Vasić, Dragoljub (2005): A játéktól a számítógépig, Zavod za udžbenike i nastavna sredstva, Beograd. Villányi Györgyné (1993): Játék a matematika?, Tárogató Kiadó, Budapest. Б р а н о в и ћ, Ж. (2004): И н ф о р м а т и к а и н а с т а в а м а т е м а т и к е, З р е њ а н и н: Т Ф „М и х а ј л о П у п и н”. Stuur-Turcsányiné (1998): Játék és programozás, Comenius Logo, Kossuth Kiadó. Web-м а т е р и ј а л о к о р и ш ћ е н о м с о ф т в е р у.			
Weekly Contact Hours: 2(30)		Lectures: 1 (15)	
		Practical work: 1 (15)	
Teaching Methods: Lecture, practice, students work on computer, discussion, consultation.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations		points	Final exam
			points

Active class participation	10	practical exam (working on computer)	30
Practical work	15	oral exam	20
Preliminary exam(s)			
Seminar(s)	25		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			