

Study Programme: Master in Elementary Teacher
Course Unit Title: Teaching mathematics with software support
Course Unit Code: MU-3-2-2-1
Name of Lecturer(s): Márta Takács, Zsolt Namesztovszki
Type and Level of Studies: Master Studies (MA)
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: 4
Prerequisites: -
Course Aims: Students introduced with possibilities of applying computers in teaching mathematics, getting to know the methodological advantages provided by the support of mathematical softwares. Matlab, Maple, Derive, Mathematica.
Learning Outcomes: Students introduced to methodical benefits of applying mathematical software packages teaching in mathematics. Students get to know available softwares in teaching mathematics.
Syllabus: <i>Theory</i> Getting to know the softwares accessible on local servers, or on remote servers. Overview of the main menus and options for the topic. Practical tasks and activities that can be done in mathematics in lower classes of elementary school. Tasks for supplementary classes for pupils with difficulties and tasks for supplementary classes for talented children. <i>Practice</i> Students present their seminar papers. Analysing, discussing.
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> Ambrus, András (1995): Bevezetés a matematikadidaktikába. Budapest: Eötvös Kiadó. (одабрана поглавља). Szendrei, Julianna (2005): Gondolod, hogy egyre megy?, Budapest: Typorex Kiadó. (одабрана поглавља).

Weekly Contact Hours: 2 (30)	Lectures: 1 (15)	Practical work: 1 (15)	
Teaching Methods: Lecture, practice, presentation, discussion, individual work, consultation.			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam	30
Practical work	20	oral exam	20
Preliminary exam(s)			
Seminar(s)	20		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			