

Course Unit Descriptor

Study Programme: Elementary Teacher
Course Unit Title: Working with talented pupils in teaching mathematics
Course Unit Code: U-3-2-6-2
Name of Lecturer(s): Márta Takács, Diana Zita
Type and Level of Studies: Undergraduate Studies (BA)
Course Status (compulsory/elective): Elective
Semester (winter/summer): 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 Mathematics 1 and 2
Course Aims: Preparing students for recognizing talented pupils who are able to reach high level in mathematics as well as for planning and making special curriculum for these children.
Learning Outcomes: Students will learn how to work with talented children. They will be able to recognize talent and organize special types of exercises for talented pupils in order to further develop their skills in solving mathematical problems.
Syllabus: <i>Theory</i> History of recognizing talents in ancient times, in the Middle Age, in Renaissance. Recognition of cognitive psychological aspects of talent. Models of talent recognition. Talent as a capability to collect, transfer and use of knowledge, as well as its practical use. Algorythmic, heuristic and intuitive problem solution. Practical methods of regoniying and working with talents. <i>Practice</i> Visual and other methods of working with talented children. How to prepare children for competitions. Most frequent types of exercises on mathematics competitions.
Required Reading: <i>Compulsory:</i> Kovács, Gábor – Balogh, László (2010): A matematikai tehetség fejlesztése http://geniuszportal.hu/sites/default/files/15_kotet_net.pdf . Csóka, Géza (2002): <i>Elemi matematika példatár</i> , Budapest: Nemzeti Tankönyvkiadó. Такач, Марта (2013): <i>Припремљени е-материјал са тематиком предмета</i> (120 страница), Учитељски факултет у Суботици. <i>Optional:</i> Orosz, Gyula – Majoros, Mária (1997): Tehetséggondozás matematikából. Tóth Könyvkiadó, Debrecen.

Збирке задатака са такмичења „Кенгур без граница”

http://geniuszportal.hu/sites/default/files/15_kotet_net.pdfyp, „Zrínyi Ilona”, такмичења у организацији Друштва математичара (одабрана поглавља).

Róka, Sándor (1999): *2000 feladat az elemi matematika köréből*. Budapest, Typotex.

**Weekly Contact Hours: 2
(30)**

Lectures: 1 (15)

Practical work: 1 (15)

Teaching Methods:

Lecture, practice, presentation, discussion, presentation, individual work, consultation.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class participation	10	written exam (practical exam on computer)	30
Practical work	10	oral exam	20
Preliminary exam(s)	20	
Seminar(s)	10		

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.