

Specification of courses for the book of courses

Study program	Preschool teacher		
Module	/		
Type and level of studies	Basic vocational studies - 1st level study program (professional bachelor de		
Name of the subject	Initial Mathematical Notions Teaching Methodology 1		
Teacher (for lectures)	Aleksandra Mandic, PhD		
Teacher/associate (for practical class)	Aleksandra Mandic, PhD		
Teacher/associate (for other forms of			
Year of study when the component is delivered			3
Semester/trimester when the component is delivered			5
Number of ECTS	4	Status of the course (compulsory/optional)	compulsory
Condition	/		
Goal of the course	Acquisition of professional and broadening of general knowledge, abilities and skills of students for the organization of conditions and management of learning and teaching processes, planning, implementation, monitoring, evaluation, self-evaluation, innovation, documentation and presentation of mathematical activities of preschool children using modern ICT		
The outcome of the course	At the end of the course, students should be trained to: 1. Implements didactic - methodical content transformation 2. Plan objectives, tasks, methods, forms, resources in mathematical activities for children, 3. Develop didactic situations that encourage the formation of initial mathematical concepts in children, 4. Create global, operational and daily plans of mathematical activities, 5. Create tools for monitoring and evaluating mathematical activities, 6. Assess the pedagogical effects of the application of new information technologies in preschool mathematics, 7. Plan mathematical activities based on innovative work models.		
Course content			
Theory classes	1. Topic, Objectives and Tasks of the Initial Mathematical Notions Teaching Methodology. 2. Research basics for the formation of initial mathematical concepts 3. Didactic-methodical analysis of content (geometric contents at the preschool age – pre-geometry, formation of figures about numbers – pre-arithmetic, 4. Planning of mathematical activities 5. Modern information technologies in mathematical activities of preschool children 6. Monitoring, evaluation and self-evaluation of children's work and educators in the field of preschool mathematics 7. Innovative models of work.		
Practical classes (other forms of teaching, research work during the studies)	Solving practical tasks. Analysis of program contents of preschool mathematics. Didactic-methodical transformation of content (creation of representative examples for formation of initial geometric and arithmetic concepts). Development of global and operational plans for the implementation of children's mathematical activities. Analysis of printed editions of preschool mathematics for children. Presentation and evaluation of educational software the contents of which contribute to the formation of initial mathematical concepts. Creating instruments for evaluating mathematical activities of preschool children. Designing, creating and presenting heuristic mathematical games. Formation of student subject portfolio. Self-evaluation of students' knowledge using on-line tests.		
Bibliography			
1	Мандић, А. (2013): <i>Дидактика предшколске математике</i> . ВШССВ, Вршац		
2	Мандић, А., Стојановић, А.: (2012): <i>Практикум за студенте</i> , ВШССВ, Вршац		
3	Група аутора: <i>Едусофт-образовни портал</i> : www.edu-soft.rs		
4	Studentski e-centar: www.studentskicentar.wix.com/aleksandra		
5			
Number of active classes per week during a semester/trimester/ year			
Lectures	Practical classes	Research work during the course	Other classes
3	1		
Teaching methods	Conversation method (heuristic), illustrative work, demonstrations, written and practical papers, e-learning.		
Mode of delivery		face-to-face	
Knowledge assessment (maximum number of points 100)			
Pre-exam obligations	Points	Final exam	Points
In class activity	10	Written exam	30
Practical classes	30	Oral exam	20
Colloquium	/		
Seminar papers	10		
Language of instruction	Serbian/English		