

# MATHEMATICS EDUCATION IN EARLY CHILDHOOD

1	Course Title:	MATHEMATICS EDUCATION IN EARLY CHILDHOOD
2	Course Code:	OKU2203
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Dr. Öğr. Üyesi MERAL TANER DERMAN
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	Dr. Öğr. Üyesi Meral TANER DERMAN mtaner@uludag.edu.tr 0224 2942184 Adres: Bursa Uludağ Üniversitesi Eğitim Fakültesi Temel Eğitim Bölümü Görükle Yerleşkesi Nilüfer / Bursa
17	Website:	
18	Objective of the Course:	The aim of this course is to help prospective early childhood education teachers know mathematical concepts, comprehend mathematical thinking skills, be aware of early childhood mathematics education and its importance, understand appropriate methods and techniques in teaching mathematics concepts, plan, apply and evaluate mathematical activities which are developed for preschool children, and have general knowledge about various mathematics education programs.
19	Contribution of the Course to Professional Development:	Students know the development of mathematical thinking skills in early childhood. Explain different approaches regarding the development of mathematical thinking. Use appropriate methods and techniques in teaching mathematical concepts. Teach concepts of mathematics by integrating with other disciplines. Make arrangements in activities in accordance with the development of children. Examine and evaluate preschool math program.
20	Learning Outcomes:	
	1	To have and apply the knowledge of early childhood mathematics education
	2	To know the importance of mathematics education in pre-school period
	3	To explain the development of mathematical concepts in preschool period
	4	To use appropriate methods and techniques in teaching mathematical concepts
	5	To examine and evaluate preschool math program
	6	To apply math concepts by integrating with other activities
	7	To apply by making arrangements in activities in accordance with the development of children

		8	To evaluating self-prepared and ready math activities		
		9			
		10			
21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	The definition of mathematics in early childhood, its theoretical foundations and its importance in daily life				
2	Principles and standards in mathematics education				
3	Development of mathematical thinking and mathematical concepts in children				
4	Mathematics education in pre-school education program				
5	Pre-counting concepts and processes (classification, comparison, matching)				
6	Pre-counting concepts and processes (distinguish, order, and pattern)				
7	Counting and numbers				
8	Space, geometry, shapes in preschool mathematics education				
9	Measurement, data analysis-graphic / probability in preschool mathematics				
Activites			Number	Duration (hour)	Total Work Load (hour)
11	Assessment in preschool mathematics education		14	3.00	42.00
Practicals/Labs			0	0.00	0.00
Self study and preparation			14	4.00	56.00
13	Examining mathematical materials and		5	5.00	25.00
Homeworks			5	5.00	25.00
Integrating material with activity			5	5.00	25.00
14	Examples of activities to develop		0	0.00	0.00
Field Studies			0	0.00	0.00
Midterm Exams			1	1.00	1.00
Others			0	0.00	0.00
Final Exams	Materials:		Ankara: PegemA Publishing	1.00	1.00
Total Work Load					150.00
Total work load/ 30 hr			Period. Nobel Bookstore, Adana.		5.00
ECTS Credit of the Course					5.00
			Education, Ankara: Pegem Academy  Güven, Y. (2000). Intuitive thinking and mathematics in early childhood, Istanbul: Yapa Yayıncılık  Güven, Y. (2005). Learning mathematical thinking and mathematics in early childhood. Istanbul: Small steps educational publications  Kandir; A., Can Yaşar, M., Yazıcı, E., Türkoğlu, D., & Yaman Baydar, I. (2016). Mathematics in Early Childhood Education. Istanbul; Morpa Cultural Publications.  Ulutaş, İ. (Ed.) (2015). Mathematics education in pre-school period. Ankara: Hedef Publishing		
23	Assesment				

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		Multiple Choice Test

## 24 ECTS / WORK LOAD TABLE

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ÖK2	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ÖK3	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ÖK4	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1
ÖK5	5	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1
ÖK6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1
ÖK7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1
ÖK8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	1
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			