

TOROS ÜNİVERSİTESİ

Vocational School
Child Development

Course Information

MATHEMATICS AT EARLY CHILDHOOD					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
CGP231	Fall	2	0	2	2

Prerequisites and co-requisites	none
Language of instruction	Turkish
Type	Required
Level of Course	Associate
Lecturer	Lect. Güzin ÖZÇELİK
Mode of Delivery	Face to Face
Suggested Subject	none
Professional practise (internship)	None
Objectives of the Course	By the end of the course, students will have become informed about: Mathematical thought; content, principles, processes and methods for pre-school maths programmes, materials towards developing mathematical thought.
Contents of the Course	Principles and standrds of maths ? Development of thought in children and the development of mathematical thought ? Concepts and processes prior to learning to count (classifying, comparing, matching, distinguishing, ordering and weaving) ? Counting and numbers, graphics, geometry, measurement, data collection ? Problem solving (adding, subtracting, multiplying, dividing) ? The language of maths ? Mathematical programmes for children from around the world ? Examining and developing maths materials

Learning Outcomes of Course

#	Learning Outcomes
1	Follows the latest developments in the field of Early Childhood Education; has the conceptual knowledge about the field and the ability to recognize the relationships between the related concepts.
2	Able to measure and evaluate the different programs, instructional strategies and methods in the field.
3	Has the knowledge of child development, learning and special needs.
4	Able to recognize and analyze the major problems in the field of Early Childhood Education. Can generate solutions based on scientific inquiry and evidence.
5	Able to develop appropriate teaching and learning strategies based on the developmental characteristics, individual differences of the early childhood age children while implementing a multi-faceted assessment and evaluation system in order to check the validity and reliability of these strategies.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction and general information about course	Lecture, discussion
2	Definition and contents of maths. Maths in our daily life	Lecture, discussion
3	Principles and standrds of maths	Lecture, discussion
4	Development of thought in children and the development of mathematical thought	Lecture, discussion
5	Concepts and processes prior to learning to count (classifying, comparing, matching, distinguishing,	Lecture, discussion

	ordering and weaving)	
6	mid-term exam	
7	Concepts and processes prior to learning to count (classifying, comparing, matching, distinguishing, ordering and weaving)	Lecture, discussion
8	Counting and numbers, graphics, geometry, measurement, data collection	Lecture, discussion
9	Counting and numbers, graphics, geometry, measurement, data collection	Lecture, discussion
10	Counting and numbers, graphics, geometry, measurement, data collection	Lecture, discussion
11	Problem solving (adding, subtracting, multiplying, dividing)	Lecture, discussion
12	Problem solving (adding, subtracting, multiplying, dividing)	Lecture, discussion
13	Problem solving (adding, subtracting, multiplying, dividing)	Lecture, discussion
14	Mathematical programmes for children from around the world	Lecture, discussion
15	Examining and developing maths materials	Lecture, discussion
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Principles and Standards for School Mathematics. NCTM.2000. ? Charlesworth.R., Radeloff,J.D (1991). Experiences in Math for Young Children.Delmar Pub, Newyork. ? Susan,S.S(1996).Early Childhood Mathematics. Allyn and Bacon Pub,USA. ? Aktaş, A.Y(2006). Okulöncesi Dönemde Matematik Eğitimi. Nobel Yayınevi, Ankara. ? İlgili tez, makale ve araştırmalar		

Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Follows the latest developments in the field of Early Childhood Education; has the conceptual knowledge about the field and the ability to recognize the relationships between the related concepts.	1,2	1,2
2	Able to measure and evaluate the different programs, instructional strategies and methods in the field.	2,6	1,2
3	Has the knowledge of child development, learning and special needs.	1,10,12	1,2
4	Able to recognize and analyze the major problems in the field of Early Childhood Education. Can generate solutions based on scientific inquiry and evidence.	1,2	1,2
5	Able to develop appropriate teaching and learning strategies based on the developmental characteristics, individual differences of the early childhood age children while implementing a multi-faceted assessment and evaluation system in order to check the validity and reliability of these strategies.		

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
3	Presentation and Seminar Preparation	1	8	8

4	Web Research, Library and Archival Work	2	5	10
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	10	10
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	2	10	20
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	1	4	4
15	Preparation for Final Exam	1	10	10
16	Final Exam	1	1	1
				120