



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Mathematics Education in Early Childhood							
Course Code		OÖÖ225		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	126 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aims of this course are to learn the main learning theories in mathematics education and to practice which methods and techniques can be used in each content in early childhood mathematics subjects.							
Course Content		The importance of mathematical thinking, the relationship of mathematics between several variables such as intelligence, sex ans social values, development of mathematical thinking during childhood and different approaches related to developing mathematical thinking, main teaching principles about education curriculum in teaching mathematics concepts, inquiry based mathematics, main mathematical concepts in early childhood education (counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.), designing activities using these concepts.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Problem Solving					
Name of Lecturer(s)		Lec. Galip GENÇ							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	70
Final Examination	1	70

Recommended or Required Reading

1	Akman, B. (Edt). (2012). Okul öncesi matematik eğitimi. Ankara: PegemA Yayıncılık.
2	Altun, Murat (2005). (2005) Matematik Öğretimi. Bursa. Erkam Matbaacılık
3	Geylani, H. ve Bayram, S. (2012). Okul öncesi matematik eğitimi. Ankara: PegemA Yayıncılık.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to the content and introduce students to the sources. To explain the aim of the course. To plan the activities to be done with students.
2	Theoretical	Foundations of mathematics teaching-learning theories
3	Theoretical	What is Mathematics? Principles of Teaching of Mathematics
4	Theoretical	The importance of mathematical thinking,
5	Theoretical	the relationship of mathematics between several variables such as intelligence, sex ans social values,
6	Theoretical	development of mathematical thinking during childhood and different approaches related to developing mathematical thinking,
7	Theoretical	Main teaching principles about education curriculum in teaching mathematics concepts
8	Intermediate Exam	Midterm Exam
9	Theoretical	inquiry based mathematics,
10	Theoretical	main mathematical concepts in early childhood education (counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.)



11	Theoretical	Activity designing related to teach numbers, counting and amount concepts
12	Theoretical	Activity designing related to teach numbers, counting and amount concepts
13	Theoretical	Activity designing related to teach numbers
14	Theoretical	Activity designing related to teach measurement
15	Theoretical	Activity designing related to basic geometrical figures

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	3	3	84
Reading	10	1	1	20
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				126
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To explain the main learning theories, theorists and their ideas
2	To explain the main principles of mathematics instruction
3	To understand the development of mathematical thinking of a child
4	To understand the development of geometrical thinking of a child
15	To understand the development of spatial thinking of a child

Programme Outcomes (Early Childhood Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, technique for the plans in the learning process, by making instructional plans related to the subject-matter.
3	To be able to gain skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophies they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter
7	To be able to become individuals faithful to the Principles and Revolutions of Atatürk, be modern, democratic, secular, protecting and developing one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture
9	To be able to become individuals believing in lifelong learning.
10	To be able to educate individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solution of these problems

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L15
P1	4	4	5	5	5
P2	4	4	5	5	5
P3	4	4	5	5	5
P4	4	4	5	5	5
P5	4	4	4	4	4
P6	4	4	4	4	4
P7	3	3	3	3	3
P8	2	2	2	2	2
P9	3	3	3	3	3
P10	3	3	2	2	2

