AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Game Based Learning in Mathematics Education						
Course Code		OÖÖ424		Couse Level		First Cycle (Bachelor's Degree)		
ECTS Credit	3	Workload	80 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to provide students to learn the basic principles and characteristics of game based learning and to put into practice in the field of mathematics education.						
Course Content		The importance of game based learning, the relationship between game based learning and several variables such as intelligence, sex and social values, the relationship between game based learning and mathematical thinking, different approaches related to develop mathematical thinking via game based learning, principles of game based learning, characteristics of game based learning, planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).						
Work Placement		N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)								

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Olkun, Sinan; Uçar, Zülbiye T. (2004). İlköğretimde etkinlik temelli Matematik öğretimi. Ankara: Anı yayıncılık.
2	Altun, Murat (2005). (2005) Matematik Öğretimi. Bursa. Erkam Matbaacılık.
3	Van de Walle, J. A. (1998). Elementary School Mathematics. Teaching Developmentally. Second Edition. Longman: New York.

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 game based teaching-learning theories
3	Theoretical	What is Mathematics? Principles of Teaching of Mathematics
4	Theoretical	The importance of game based learning
5	Theoretical	the relationship between game based learning and several variables such as intelligence, sex and social values,
6	Theoretical	the relationship between game based learning and mathematical thinking,
7	Theoretical	different approaches related to develop mathematical thinking via game based learning,
8	Theoretical	principles of game based learning,
9	Intermediate Exam	Intermediate exam
10	Theoretical	characteristics of game based learning,
11	Theoretical	planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).
12	Theoretical	planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).
13	Theoretical	planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).
14	Theoretical	Planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).
15	Theoretical	planning activities related to teach basic mathematical concepts (such as counting, amounts, operations in natural numbers, conceptions related to measurement, main geometrical figures etc.).

16	Final Exam	FINAL EXAM

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	1	14
Assignment	12	0	1	12
Term Project	14	0	1	14
Individual Work	10	0	1	10
Midterm Examination	1	0	1	1
Final Examination	1	0	1	1
			Total Workload (Hours)	80
		[Total Workload (Hours) / 25*] = **ECTS**		3

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To explain the main learning theories, theorists and their ideas related to game based learning
2	To explain the main principles of game based learning
3	To understand the characteristics of game based learning,
4	To understand the importance of game based learning in mathematics education,
5	To practice game based learning activities in mathematics education.

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 Ataturk, be modern, democratic,, secular, protecting and deveoping 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	L5
P1	5	5	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	1	1	1	1	1
P5	1	1	1	1	1
P6	1	1	1	1	1
P7	5	5	5	5	5
P8	1	1	1	1	1
P9	5	5	5	5	5
P10	1	1	1	1	1