



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Science Education							
Course Code		OÖÖ317		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	80 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To know the effective learning steps of science, know the basic problems in science teaching and learning, to introduce science teaching approaches and executing contemporary practices							
Course Content		Educational Sciences and science education, thinking and learning at science fields, cognitive development and science education, basic educational sciences conceptions, conceptual systems and understanding, teaching models, improving and using teaching science tools, measurement and evaluation at teaching science; scientific knowledge, conceptual approach, scientific method, process approach.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving					
Name of Lecturer(s)									

### Prerequisites & Co-requisites

Equivalent Course	OÖÖ223
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### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Akman, B., Uyanık Balat, G. ve Güler, T. (2010).Okul Öncesi Dönemde Fen Eğitimi. Ankara: PEGEM Akademi.
2	Aktaş Arnas, Y. (2007). Fen ve Matematik Öğreniyorum. İstanbul: Morpa.
3	Arı, M. Ve Çelebi Öncü, E. (2007). Fen Doğa ve Matematik Uygulamaları. Ankara: Kök Yayıncılık.
4	Şimşek, N. Ve Çınar, Y. (2008). Okul Öncesi Dönemde Fen ve Teknoloji Öğretimi. Ankara: Anı Yayıncılık.

Week	Weekly Detailed Course Contents	
1	Theoretical	What is science and how children learn to science?
	Preparation Work	Aktaş Arnas, Y. (2007). Fen ve Matematik Öğreniyorum. İstanbul: Morpa.
2	Theoretical	Scientific process skills
	Preparation Work	Aktaş Arnas, Y. (2007). Fen ve Matematik Öğreniyorum. İstanbul: Morpa.
3	Theoretical	Science programs in preschool education
4	Theoretical	Science and nature corner and the materials of science education
	Preparation Work	Akman, B., Uyanık Balat, G. ve Güler, T. (2010).Okul Öncesi Dönemde Fen Eğitimi. Ankara: PEGEM Akademi.
5	Theoretical	The role of teacher in science education
6	Theoretical	Evaluation in science education
7	Theoretical	The role of family in science education
8	Intermediate Exam	Intermediate Exam
9	Theoretical	Environmental education
10	Theoretical	Preparation of science activities in preschool education
	Preparation Work	Arı, M. Ve Çelebi Öncü, E. (2007). Fen Doğa ve Matematik Uygulamaları. Ankara: Kök Yayıncılık.
11	Theoretical	Preparation of science activities in preschool education
	Preparation Work	Arı, M. Ve Çelebi Öncü, E. (2007). Fen Doğa ve Matematik Uygulamaları. Ankara: Kök Yayıncılık.
12	Theoretical	Preparation of science activities in preschool education
	Preparation Work	Şimşek, N. Ve Çınar, Y. (2008). Okul Öncesi Dönemde Fen ve Teknoloji Öğretimi. Ankara: Anı Yayıncılık.



13	Theoretical	Preparation of science activities in preschool education
	Preparation Work	Şimşek, N. Ve Çınar, Y. (2008). Okul Öncesi Dönemde Fen ve Teknoloji Öğretimi. Ankara: Anı Yayıncılık.
14	Theoretical	Presentation of the activities
15	Theoretical	Presentation of the activities
16	Final Exam	FINAL EXAM

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	0	2	28
Assignment	3	0	2	6
Reading	3	0	2	6
Midterm Examination	1	0	5	5
Final Examination	1	0	7	7
Total Workload (Hours)				80
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Know the basic concepts and theories of science
2	Know learning and teaching approaches
3	Know the techniques being used in pre school teaching and executes these techniques
4	Know the pre school science teaching curriculum
5	Know the techniques in science education and can prepare proper settings
6	Develop materials suitable for science and nature executions

**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	L5	L6
P1	5	5	5	5	5	5
P2	5	5	5	5	5	5
P3	4	4	4	4	4	4
P4	4	4	4	4	4	4
P5	4	4	5	4	4	4
P6	5	5	5	5	5	5
P7	2	2	2	2	2	2
P8	2	2	2	2	2	2
P9	3	4	3	2	2	2
P10	4	2	4	3	3	3

