



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Designing Basic Instructional Materials and Experiment in Life Sciences							
Course Code		FBÖ404		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Ability to build simple tools in science courses and information about experimental techniques which will be teachers' advantages							
Course Content		Examination of science and how science develops, benefits of applications with simple tools, required materials for preparation of simple tools, which material can be gathered from where, required processes for tool preparation and importance of science and technology laboratory experiment technique.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, Discussion, Project Based Study					
Name of Lecturer(s)									

### Prerequisites & Co-requisites

Equivalent Course	FBÖ259
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### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	Akgün, Ş., (2000). Çevre İmkanları ile Basit Ders Araçları Yapımı.
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Week	Weekly Detailed Course Contents	
1	Theoretical	What is science and how science develops
2	Theoretical	Benefits of applications with simple tools
3	Theoretical	Required materials for preparation of simple tools
4	Theoretical	Which material can be gathered from where
5	Theoretical	Required processes for tool preparation
6	Theoretical	Recycling processes
7	Theoretical	Sample science and technology tools with simple materials from environment
8	Theoretical	Importance of science and technology laboratory experiment technique
9	Intermediate Exam	Midterm Exam
10	Theoretical	Sample experiments for 4th grades in science and technology course
11	Theoretical	Sample experiments for 4th grades in science and technology course
12	Theoretical	Sample experiments for 4th grades in science and technology course
13	Theoretical	Sample experiments for 5th grades in science and technology course
14	Theoretical	Sample experiments for 5th grades in science and technology course
15	Theoretical	Sample experiments for 5th grades in science and technology course
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	14	0	1	14
Term Project	14	0	1	14
Individual Work	14	0	2	28
Midterm Examination	1	8	1	9



Final Examination	1	6	1	7
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	Benefits of applications with simple tools
2	Required materials to construct tools for science and technology courses
3	How to obtain materials for tools construction in science and technology
4	Required processes for tool preparation
5	Recycling process
6	Sample science and technology tools with simple materials from environment
7	Importance of science and technology laboratory experiment technique
8	Sample science and technology tools for 4th and 5th grades with simple materials from environment

### Programme Outcomes (Science 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, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the 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 philosophy 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 gain the vision of being 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 solutions 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	L7	L8
P1	3	3	3	3	3	3	3	3
P2	3	3	3	3	3	3	3	3
P3	3	3	3	3	3	3	3	3
P4	3	3	3	3	3	3	3	3
P6	3	3	3	3	3	3	3	3
P9	3	3	3	3	3	3	3	3

