



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
MATHEMATICS AND SCIENCE EDUCATION
SCIENCE EDUCATION
SCIENCE EDUCATION MASTER
COURSE INFORMATION FORM

Course Title	Creativity in Science Education								
Course Code	İFB509		Course Level		Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	Understanding of creativity and scientific creativity in science education								
Course Content	Models of Scientific Creativity, tehcnics of improvement of creativeness, Creativity and intelligence								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
2	Dimensions of Creativity, Boden, M. A.
3	Yaratıcı Düşünce, N. Sungur.
4	Creativity in Education, A. Craft, B. Jeffrey, M. Leibling.

Week	Weekly Detailed Course Contents	
1	Theoretical	Creativity and Scientific Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
2	Theoretical	Nature of Scientific Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
3	Theoretical	Models of Scientific Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
4	Theoretical	Models of Scientific Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
5	Theoretical	Creativity and intelligence
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
6	Theoretical	Factors affecting creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
7	Theoretical	Factors affecting creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
8	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
	Intermediate Exam	MIDTERM EXAM
9	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
10	Theoretical	Creative Scientific Activities
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
11	Theoretical	Creative Scientific Activities
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
12	Theoretical	Problem Solving, Findings and Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
13	Theoretical	Problem Solving, Findings and Creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
14	Theoretical	Inquiry approach and creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza



15	Theoretical	Inquiry approach and creativity
	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
16	Preparation Work	Yaratıcılığı Geliştirme Teknikleri, E. T. Rıza
	Final Exam	TERM

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70
Assignment	5	10	0	50
Reading	5	9	0	45
Practice Examination	1	20	3	23
Midterm Examination	1	10	2	12
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to understand creativity and scientific creativity.
2	To be able to understand dimensions of creativity.
3	To be able to use techniques which develop creativity.
4	To be able to comprehend the importance of creativity in science education.
5	to be able to investigate studies about creativity.

Programme Outcomes (Science Education Master)

1	To be able to have an expert theoretical knowledge within the field of science education.
2	To be able to transfer expert knowledge gained in science education into various instructional environment.
3	To be able to integrate science education knowledge with the other disciplines and product functional knowledge
4	To be able to use information and communication technologies efficiently in conceptual learning
5	To be able to find scientific solutions to the problems in the field of science education
6	To be able to evaluate the knowledge critically in the field
7	To be able to participate in team projects in the science education field
8	To be able to adopt lifelong learning strategies to his/her studies
9	To be able to use at least one foreign language efficiently in oral and verbal communication
10	To be able to share national and international data in the field of science education
11	To be able to comprehend and evaluate science-technology-society and environment interactions
12	To be able to comprehends science under the ethical values and take account of ethical considerations
13	To be able to use scientific information in the other domains that is gained in the masters field and have the transfer skills
14	To be able to follow the current development in the science education field
15	To be able to develop strategical plans and evaluate them in the context of quality processes

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	2	4	5
P2			5		
P5			4		
P6	2	2	2	2	5
P7			3		
P8	4	4	4	4	5
P13	1	1	3	1	5
P14	4	4	4	4	5
P15			4		

