AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Scientific Research Methods							
Course Code		FBÖ313		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	76 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To gain the knowledge and skills for doing a scientific research							
Course Content		The basic concepts on scientific research, research methods, the instruments for collecting data, analysis of data, literature examination, problem solving, validity and reliability in the research, basic statistics, write a research report.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study					
Name of Lecturer(s)									

Prerequisites & Co-requisities	
Equivalent Course	EBB253

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
2	Çepni, S. 2007; Araştırma ve Proje Çalışmalarına Giriş. Genişletilmiş 3. Baskı, Celepler Matbaacılık, Trabzon.
3	Karasar, N. 1999; Bilimsel Araştırma Yöntemi, Nobel Yayın Dağıtım, 9. Basım, Ankara.
4	Hovardaoğlu, S. 2000; Davranış Bilimleri İçin Araştırma Teknikleri, Ankara.

Week	Weekly Detailed Course Contents	
1	Theoretical	Information sources related to reality: experience, reasoning, research Basic assumption and nature of science
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
2	Theoretical	Quantitative and qualitative approaches
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
3	Theoretical	Quantitative research methods: survey, experimental designs
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
4	Theoretical	Qualitative research methods: etnography, phenomenology, case study, grounded theory
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
5	Theoretical	Developmental research, historical research, action research
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
6	Theoretical	Data gathering techniques: questionnaire, observation, interview, document analysis
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
7	Theoretical	Population, sample, sampling: probability sampling, purposeful sampling
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
8	Theoretical	Quality in educational research: validity, reliability, objectivity, generalizability
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
9	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
	Intermediate Exam	Midterm exam
10	Theoretical	Ethics in scientific research
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
11	Theoretical	Writing research problem
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
12	Theoretical	Literature review and citation

12	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
13	Theoretical	Quantitative data analysis
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
14	Theoretical	Qualitative data analysis
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
15	Theoretical	writing scientific research report
	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
16	Preparation Work	Büyüköztürk, Ş. (2008). Bilimsel Araştırma Yöntemleri, Anı Yayıncılık, Ankara.
	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Reading	12	0	3	36
Midterm Examination	1	4	1	5
Final Examination	1	6	1	7
			Total Workload (Hours)	76
			[Total Workload (Hours) / 25*] = **ECTS**	3

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	explain the basic concepts related to the research.
2	construct research problem and hypothesis
3	explain the research methods and the instruments for collecting data.
4	explain how to analyze the data.
5	explain the concepts of validity and reliability.
6	prepare a scientific research report.

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 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 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
P4	4					
P6	5	4	5	4	2	3
P9	5	5	5	5	5	5
P10	5	5	5	5	5	5