AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Scientific Research Techniques and Project Preparation								
Course Code	GMP627		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	6	Workload	150 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	At the end of this course, students will acquire the knowledge and skills to carry out a project by choosing a scientific research topic appropriate to their field of expertise.								
Course Content	Things to know before preparing a project; Basic concepts (knowledge, science, scientific research, scientific activities, terms related to scientific research), selection of scientific research topic, hypothesis formation, research planning, project management, analysis and documentation of research results will be explained. Project cycles and phases will be discussed through active discussions. Within the scope of this course, applications in project writing, project presentations, scoring and use of evaluation compass will be examined.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)	Assoc. Prof. Olcay BOYACIOĞLU								

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70

Recommended or Required Reading	
1	Çepni, S. (2001), “Araştırma ve Proje Çalışmalarına Giriş”, Erol Ofset, Trabzon
2	Gürdal, A.(2004), “Proje Raporu Yazımı” İlk ve Orta Öğretimde Araştırma Teknikleri ve Proje, Maltepe Üniversitesi Yayınları, İstanbul.
3	Şahin, F.(2004), ”Proje ve Okul” İlk ve Orta Öğretimde Araştırma Teknikleri ve Proje, Maltepe Üniversitesi Yayınları, İstanbul
4	Yalçın, Ş.(2004), ”Proje ve Okul” İlk ve Orta Öğretimde Araştırma Teknikleri ve proje, Maltepe Üniversitesi Yayınları, İstanbul
5	TÜBİTAK project preparation guides; Ministry of Agriculture and Forestry Research and Development support program Project Preparation and Application guide; Ministry of Industry and Technology development agencies project preparation guides, European Union project preparation guides.

Week	**Weekly Detailed Course Contents & Teaching Methods**	
1	Theoretical	Basic Concepts: Scientific Research and Its Importance, The Place and Importance of Technology in Scientific Research, Research Education
2	Theoretical	Preparing a Scientific Project Proposal: Problem, Purpose, Importance, Hypotheses,
3	Theoretical	Preparing a Scientific Project Proposal: Definitions, Documentation
4	Theoretical	Preparing a Scientific Research Proposal: Literature Scanning and Collection, Utilizing the Internet, Following Periodicals,
5	Theoretical	Preparing a Scientific Research Proposal: Method
6	Theoretical	Scientific Project Preparation
7	Theoretical	Scientific Project Writing and Scientific Project Presentation,
8	Theoretical	Thesis Research: Establishing a Hypothesis, Midterm Exam
9	Theoretical	Thesis Research: Establishing a Hypothesis
10	Theoretical	Design of the Thesis: Compilation of Scientific Study
11	Theoretical	Statistical Studies
12	Theoretical	Thesis Writing and Thesis Defense Stage
13	Theoretical	Presentation Forms of a Scientific Study (Poster Presentation or Oral Presentation)
14	Theoretical	Preparation and Writing of a Scientific Research Article
15	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	0	4	8
Individual Work	14	0	4	56
Midterm Examination	1	18	3	21

Final Examination	1	20	3	23
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To be able to use presentation techniques,
2	To be able to apply research report, book presentation, thesis, article and project writing techniques,
3	To be able to apply data collection and analysis techniques,
4	To be able to research relevant literature and create a project topic,
5	To be able to present a project in accordance with scientific rules

Programme Outcomes *(Food Engineering Doctorate)*	
1	Developing and investigating the details of current and advanced knowledge in the field of Food Engineering by original thought and/or research on the level of expertise based on the graduate qualification and reaching to the original definitions that bring innovation to science.
2	Gain of ability of develop strategies, policies and implementation plans in the field of food engineering and evaluate the results within the framework of quality processes.
3	Gain of ability to perceive, design, evaluate and finish an original process by using and following the knowledge of the recent developments in the engineering fields.
4	Gain of ability of making critical analysis, synthesis and evaluation of ideas and development in food engineering field
5	Having advanced knowledge of food science and its applications based on doctoral level qualifications.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L2	L3	L4	L5
P1		3		
P4	2		4	3
P5		3	3	