



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Spices Technology								
Course Code	GMP602		Course Level		Third Cycle (Doctorate Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	This course introduces commonly used spices, their production steps and storage conditions, active ingredient extraction methods from spices and their health benefits.								
Course Content	Characterization and classification of spices, production of spices, commercial importance and consumption of spices, active ingredients of the spices, postharvest treatments, spices processing technologies, packaging and storage conditions, health benefits of the spices.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	15
Final Examination	1	60
Assignment	1	10
Term Assignment	1	15

Recommended or Required Reading	
1	Peter, K.V. 2012. Handbook of herbs and spices Vol. 1-2, Woodhead Publishing Series in Food Science,
2	Baydar, H. 2005. Tıbbi, Aromatik ve Keyf Bitkileri Bilimi ve Teknolojisi. Süleyman Demirel Üniversitesi, Isparta, Yayın no: 51
3	Baytop, A. 1996. Farmasötik Botanik Ders Kitabı. İstanbul Üniversitesi, Eczacılık Fakültesi, Yayın No:58

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Characterization and classification of the spices
2	Theoretical	Production, economy, and consumption
3	Theoretical	Active ingredients
4	Theoretical	Commonly used spices
5	Theoretical	Postharvest treatments
6	Theoretical	Drying, Cleaning, Sorting
7	Theoretical	Processing technologies of the spices
8	Theoretical	Ground spices
9	Theoretical	Spices extracts
10	Theoretical	Spices essences and emulsions
11	Theoretical	Spices pastes and concentrates
12	Theoretical	Essential oils
13	Theoretical	Packaging and storage
14	Theoretical	Health benefits of spices

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	3	98
Assignment	2	10	3	26
Term Project	1	20	3	23
Midterm Examination	1	27	3	30



Final Examination	1	20	3	23
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = ECTS	8
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	
2	
3	
4	
5	

### 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

	L1	L2	L3	L4	L5
P1	3	3	3	3	2
P2		2	3	3	3
P3	2	2	2		3
P4				2	3
P5	3	3	2		3

