



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
FIELD CROPS
FIELD CROPS
FIELD CROPS MASTER
COURSE INFORMATION FORM

Course Title	Aromatic Plants								
Course Code	ZTB514	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	201 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The objective of this course is to introduce secondary metabolites, analytical methods and cultivation of plant techniques.								
Course Content	The history, importance and uses of aromatic plants, economic importance of aromatic plants, the concept of primary and secondary metabolites, the properties and changes of secondary metabolites, uses and characteristics of essential oils, the obtaining methods of essential oils, the general introduction, cultivation and utilization of important aromatic plants .								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Project Based Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	1. Taiz, L. and Zeiger, E. 1987. Plant Physiology. The Benjamin /Cummings Publishing Company, Inc.
2	2. Ceylan, A., 1996. Tıbbi Bitkiler II (Uçucu Yağ Bitkileri) Ege Üniv. Zir. Fak. Yay. No: 481, Bornova
3	3. Baytop, T., 1999. Türkiye'de Bitkiler İle Tedavi (Geçmişte ve Bugün) İlaveli İkinci Baskı, Nobel Tıp Kitabevleri, İstanbul
4	4. Zeybek, N., U. Zeybek, 1994. Farmasötik Botanik, E. Ü. Ecz. Fak. Yay. No: 2, Bornova
5	5. Farklı kaynaklardan derlenmiş sunumlar ve ders notları, internet kaynakları

Week	Weekly Detailed Course Contents	
1	Theoretical	The history, importance and uses of aromatic plants
	Preparation Work	Literature review
2	Theoretical	The economic importance of aromatic plants
	Preparation Work	Literature review
3	Theoretical	The concept of primary and secondary metabolites, and their properties
	Preparation Work	Literature review
4	Theoretical	The variation of the secondary metabolites
	Preparation Work	Literature review
5	Theoretical	The importance of essential oils, uses and characteristics
	Preparation Work	Literature review
6	Theoretical	Methods of obtaining essential oils
	Preparation Work	Literature review
7	Theoretical	The general presentation of important aromatic plants, the definition and use of culture of Narcissus spp.
	Preparation Work	Literature review
8	Intermediate Exam	Midterm Exam
9	Theoretical	The definition, cultivation and utilization of Rosa damascena
	Preparation Work	Literature review
10	Theoretical	The definition, cultivation and utilization of Iris germanica, and Jasminum grandiflorum
	Preparation Work	Literature review
11	Theoretical	The definition, cultivation and utilization of Melissa officinalis and Lippia citridora
	Preparation Work	Literature review
12	Theoretical	The definition, cultivation and utilization of Salvia spp.



12	Preparation Work	Literature review
13	Theoretical	The definition, cultivation and utilization of <i>Ocimum basilicum</i> and <i>Rosmarinus officinalis</i>
	Preparation Work	Literature review
14	Theoretical	The definition, cultivation and utilization of <i>Laurus nobilis</i>
	Preparation Work	Literature review
15	Theoretical	Term project presentations
	Preparation Work	Preparing Report based on the literatures
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	2	56
Lecture - Practice	14	2	2	56
Assignment	2	20	1	42
Laboratory	2	5	0	10
Midterm Examination	1	15	1	16
Final Examination	1	20	1	21
Total Workload (Hours)				201
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to comprehend the importance and the economy of aromatic plants
2	To be able to acquire the information about the chemical properties of aromatic plants
3	To be able to perceive the general principles of growing with the morphological characteristics of some aromatic plants
4	To be able to comprehend the active components suitable plants for the industrial using of aromatic plants
5	To be able to comprehend and apply the supply of plant material for the production, cultivation, drug preparation, development of marketing processes.

Programme Outcomes (Field Crops Master)

1	To be able to improve and deepen the level of expertise in field crops on the basis of the departments licenses qualifications.
2	To be able to recognize the subjects related to field crops, to be able to solve these and make interpretation.
3	To be able to have the skills of acting independently, to have power to decide and to create.
4	To be able to work in teams between departments
5	To be able to give briefing about latest information of Field Crops in written, oral and visual ways.
6	To be able to take responsibility for developing the new approaches and to formulate a solution facing unforeseen complex situations of applications,
7	To be able to defend the original opinions in both Turkish and in foreign languages by using these languages and communicating effectively.
8	To be able to contribute to science by producing knowledge for the aim of improving quality, efficiency and sustainability
9	To be able to apply breeding methods in order to improve new varieties for Field Crops.
10	To be able to maintain and select the appropriate statistical methods within the framework of the study, evaluation of scientific ethics; to convert the results into a report/dissertation and to offer them by producing scientific publications.

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	5	5	5
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	5	5	5	3	5
P6	5	5	4	5	5
P7	5	5	5	4	4
P8	5	5	4	4	4
P9	5	5	3	5	4
P10	5	3	3	3	3

