



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Medicinal Plants							
Course Code		TB304		Couse Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		The importance of medicinal plants, its economy, growing techniques, the importance of secondary materials and its variability, to teach the general principles of growing some plants of economic importance for Turkey.							
Course Content		The importance of medicinal plants, classification, economic, ecological requirements, culture, post-harvest operations, drugs, the importance of secondary metabolites, variability of effective substances, features of essential oils, its obtaining, determine of the quality in drugs, Introduction to plants containing essential oil, morphological, growing and consumption to some plants of including family Apiaceae, Asteraceae, Lamiaceae, and Ranunculaceae.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Discussion, Individual Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	Ceylan, A., 1995. Medicinal plants I, Ege Univ, Faculty of Agriculture Publications, No: 312
2	Ceylan, A., 1996. Medicinal Plants II, Ege Univ, Faculty of Agriculture Publications, No: 481
3	Baydar, H., 2009. Science and Technology of Medicinal and Aromatic Plants, Faculty of Agriculture, Suleyman Demirel Publication No.: 51
4	Compiled from different sources, and Lecture Notes Presentations Internet Resources

Week	Weekly Detailed Course Contents	
1	Theoretical	The historical development of medicinal plants, and the importance of endemism
	Practice	literature review
2	Theoretical	Classification of medicinal plants and its uses
	Practice	Examination of Medicinal plant
3	Theoretical	Economic importance of medicinal plants
	Practice	Preparation of seedling
4	Theoretical	Ecological aspects of medicinal plants
	Practice	Showing of medicinal plant studies in field
5	Theoretical	Culture of medicinal plants
	Practice	Care and presentation of plants in field
6	Theoretical	Drying, sterilization and storage of medicinal plants, drugs
	Practice	Cutting and planting of some medicinal plants
7	Theoretical	Secondary metabolites and its importance
	Practice	Preparation of herbarium
8	Intermediate Exam	Midterm exam
9	Theoretical	Variability of effective substances in medicinal plants
	Practice	Care and examination of seedlings
10	Theoretical	Essential oils, its specification and acquisition, and determination of the quality of drugs
	Practice	Presentation of Medicinal and aromatic plants laboratory
11	Theoretical	Morphological, culture, consumption of some plants of including Apiaceae family, (Pimpinella anisum, Coriandrum sativum, Carum carvi)
	Practice	Analyze of essential oil



12	Theoretical	Morphological, culture, consumption of some plants of including Apiaceae, Asteraceae and Ranunculaceae family, (Foeniculum vulgare, pyrethrum cinerariaefolium, Nigella sativa)
	Practice	Planting of seedlings in field
13	Theoretical	Morphological, culture, consumption of some plants of including Lamiaceae(Lavandula officinalis, Origanum onites, Mentha piperita)
	Practice	Planting of cuttings in field
14	Theoretical	Term project presentations
	Practice	Care of cuttings and seedlings
15	Theoretical	Term project presentations
16	Final Exam	Final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	0	1	14
Midterm Examination	1	5	1	6
Final Examination	1	12	1	13
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To be able to comprehend the importance of medicinal plants
2	To be able to perceive the morphological characteristics with the general principles of cultivation of medicinal plants and to evaluate its practice
3	To be able to distinguish the differences in the cultivation of medical plant according to field crops
4	To able to get information on drugs, and, drying, sterilization, storage of medicinal plants
5	To be able to grasp the duration of design to production and evaluation of some plant species for new plant gain

### Programme Outcomes (Horticulture)

1	To provide practical learning of production and cultivation techniques in the field of horticulture, to introduce the current status of new techniques and to create a perspective based on efficient, economical and quality production techniques for the future
2	To develop the ability to think in the professional field and to gain the ability to produce projects by making innovative approaches
3	To contribute to the development of appropriate breeding strategies in the field of horticulture, especially for sector-based areas, and to provide a perspective for breeding and new variety development in the commercial field
4	To contribute to the possibilities of using technology in the field of horticulture, to create awareness that they can develop activities in the sector in harmony with different disciplines
5	To gain the ability to analyze field work and hypothesis formulation, experiment planning, experiment and research management, data acquisition and evaluation skills related to research topics for the solution of problems encountered in horticultural issues, to shed light on the perspective of their use in public and private sector areas
6	To develop collaboration with different departments in the field of agricultural engineering, to develop the ability to plan research and to work in harmony with different stakeholders in an integrated manner
7	To provide candidates who plan a career in academia, public and private sectors with the skills of research planning, execution and evaluation, report writing, analyzing-understanding-evaluating written reports, and making presentations to sector stakeholders and academia.
8	To gain the ability to create awareness about accessing and developing information and technology within the framework of the principle of lifelong learning
9	To have knowledge about the principles of professional ethics, to gain the ability to make ethical responsibility sustainable throughout professional life
10	To have sufficient knowledge about the quality standards of horticultural crops, evaluation and preservation of products, to have the ability to take initiatives that will create awareness with innovative approaches on these issues
11	To have knowledge about the effects of Agricultural Engineering-Horticulture applications on the environment, human and animal health and sustainable agricultural systems; also to be aware of the legal consequences of engineering solutions to 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
P2	5	5	5	5	5
P7	5	5	5	5	5



P8	5	5	5	5	5
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