



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		General Plant Science I							
Course Code		TAP101		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	98 (Hours)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To define the plant mean Getting to know the plant cell To recognize plant tissues Learn photosynthesis and products							
Course Content		What is the plant? What is in the plant cell? How is the plant anatomy? What are plant tissues and tasks? How anatomical features differ in different plant groups? What is the photosynthesis? What are the metamorphoses seen in the plant?							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	J.D. Mauseth, 2017. Botanik: Bitki Biyolojisine Giriş. Nobel Akademik Yayıncılık, 684 p.
2	https://acikders.ankara.edu.tr/pluginfile.php/63944/mod_resource/content/1/botanik%201.pdf
3	S. Bozcuk, 2011. Genel Botanik, Hatiboğlu Yayınları, 190 p.

Week	Weekly Detailed Course Contents	
1	Theoretical	What is the plant? What is the botany? What are the differences between plants and animals?
	Practice	Methods of cross-section. Introduction of microscope. Examination of the plant cell.
2	Theoretical	Cell wall, Passages and types, Plastids, Ergastic substances
	Practice	The examination of the plant cell (plastids, passages and types, ergastic substances).
3	Theoretical	The plant tissues
	Practice	Investigation of tissues and structures in transverse, longitudinal and superficial sections of leaf
4	Theoretical	meristematic tissues and classification according to their location
	Practice	Examination of meristematic tissues in live plant samples and their cross-sections
5	Theoretical	Development of the constant tissues from the cambium
	Practice	Examination of the stem cross sections of gymnosperm, dicotyl and monocotyl plants
6	Theoretical	The constant and epidermal tissue
	Practice	Epidermal and constant tissues of the leaf, stem and root cross-sections
7	Theoretical	Parenchyma and support (Scleranchyma and collenchyma structures) tissue
	Practice	Examination of parenchyma, sclerenchyma and collenchyma structures in stem and root sections
8	Intermediate Exam	The exam
9	Theoretical	Transmission tissue
	Practice	Examination of vascular bundles and their elements in gymnosperms, dicotyls and monocotyls
10	Theoretical	The secretory tissue
	Practice	Examination of secretory laticifer, channels, cells and hairs
11	Theoretical	Metamorphoses in plants
	Practice	The discovery and examination of stem, root and leaf metamorphosis samples in our lives
12	Theoretical	Life forms and stem shapes in plants
	Practice	The discovery of life forms and stem shapes of plants around us
13	Theoretical	Pollination and fruit in flowering plants
	Practice	Examination of flower and fruit samples
14	Theoretical	Leaf shapes and arrangement of plants



14	Practice	Leaf shapes and arrangement of plants
15	Theoretical	General repetition and completion of missing information
16	Final Exam	The exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Lecture - Practice	14	1	2	42
Midterm Examination	1	11	1	12
Final Examination	1	15	1	16
Total Workload (Hours)				98
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	It can describe plant, botany and plant morphology
2	To define the general parts of plants
3	It can describe the plant tissues
4	It can recognize plant cell, plant ergastic substances
5	It knows plastids, learns the mechanism of photosynthesis

Programme Outcomes (Medical and Aromatic Plants)

1	Understands the importance of medicinal and aromatic plants in the World and Turkey
2	Learn about the general characteristics of medicinal and aromatic plants. Learn the important issues in cultivation and can apply.
3	Learn about usage technologies about medicinal and aromatic plants and can apply.
4	Inform of producers of medicinal and aromatic plant species in offering, material supply, production process, marketing matter.
5	Know and follow the laws and regulations pertaining to the profession.
6	Learns morphological and anatomical structures of plants.
7	Learns to identify medicinal and aromatic plants.
8	To be able to behave sensitively towards environmental issues at national and global levels and to be able to interpret solution-oriented information; to be able to be an environmentally conscious and entrepreneurial individual
9	To be able to follow, evaluate and implement new developments and applications in the cultivation of medicinal and aromatic plants independently or as a team.

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		3		2	2
P6	5		5		
P7	4				

