

School of Pharmacy / School of Pharmacy (English)

2024 - 2025 Academic Year

PHARMACEUTICAL BOTANY LAB.

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
PHARMACEUTICAL BOTANY LAB.	PHA2213095	Spring Semester	0+3	1,5	3
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	English				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Required				
Course Coordinator	Assist.Prof. Şule Nur KARAVUŞ				
Name of Lecturer(s)	Assist.Prof. Şule Nur KARAVUŞ				
Assistant(s)					
Aim	Anatomical/morphological properties of medicinal plants and their identification using the microscopy and botanical family identification keys.				
Course Content	This course contains; Introduction to Microscopy and plant cells.,Morphological properties of leaves,Glandular trichomes and hairs.,Crystalline cellular structures.,Morphological properties of flowers.,Morphological properties of fruits and seeds,Pinaceae, Liliaceae and Papaveraceae.,Characteristic properties of Lamiaceae and Leguminosae.,Characteristic properties of Apiaceae, and Asteraceae families,Morphology of drugs.,Morphology of drugs. ,Morphology of drugs.,Morphology of drugs.,Identification of plant families,Preparation of herbarium samples. .				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
1. Overview of plants			10, 14, 16, 9	A	
1.1. Recognize the parts of the microscope			10, 14, 16, 9	A	
1.2. Identify plant cells using a microscope.			10, 14, 16, 9	A	
1.3. Differentiate plant tissues using their microscopical characteristics.			10, 14, 16, 9	A	
2. Basic parts of the plant.			10, 14, 16, 9	A	
2.1. Describe the morphology of plant leaves.			10, 14, 16, 9	A	
2.2. Describe the morphology of flowers.			10, 14, 16, 9	A	
2.3. Describe the morphology of fruits.			10, 14, 16, 9	A	
3. Will be able to define the characteristics of important families in terms of medicinal plants and identify these families from their characteristic morphological features by using identification keys.			10, 14, 16, 9	A	
3.1. Identify characteristic morphological features of medicinal plants and drugs.			10, 14, 16, 9	A	
3.2. Önemli familyaların morfolojik özelliklerini açıklar.			10, 14, 16, 9	A	
3.3. Identify Pinaceae, Liliaceae, Lamiaceae, Leguminosae, Apiaceae, and Asteraceae families			10, 14, 16, 9	A	
Teaching Methods	10: Discussion Method, 14: Self Study Method, 16: Question - Answer Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Introduction to Microscopy and plant cells.	1,2			
2	Morphological properties of leaves	1. 2			
3	Glandular trichomes and hairs.	1, 2			
4	Crystalline cellular structures.	1. 2			
5	Morphological properties of flowers.	1, 2			
6	Morphological properties of fruits and seeds	1, 2			
7	Pinaceae, Liliaceae and Papaveraceae.	1, 2			
8	Characteristic properties of Lamiaceae and Leguminosae.	1, 2			
9	Characteristic properties of Apiaceae, and Asteraceae families	1, 2			
10	Morphology of drugs.	1, 2			
11	Morphology of drugs.	1, 2			
12	Morphology of drugs.	1, 2			
13	Morphology of drugs.	1, 2			
13	Identification of plant families	1, 2			
14	Preparation of herbarium samples.	1, 2			
Evaluation Methods		Weight(%)			
Midterm Exam		60			
General Exam		40			

Resources	
1. Applied Pharmaceutical Botany lecture notes	
2. Farmasötik Botanik, N. Tanker, M. Koyuncu, M. Coşkun, Ankara Üniversitesi Basımevi, Yayın No: 93, 2021.1-Farmasötik Botanik Uygulama, N. Tanker, Ankara Üniversitesi Basımevi, Yayın No. 92, 2007. 2-Farmasötik Botanik, N. Tanker, M. Koyuncu, M. Coşkun, Ankara Üniversitesi Basımevi, Yayın No: 93, 2021	