**Ankara Üniversitesi  
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu

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| Dersin Kodu ve İsmi | **BIO 206 PLANT MORPHOLOGY LAB.** |
| Dersin Sorumlusu | DR. AYDAN ACAR ŞAHİN |
| Dersin Düzeyi | BACHELOR’S DEGREE |
| Dersin Kredisi | (2 0 0) 2 |
| Dersin Türü | Compulsory |
| Dersin İçeriği | General Information on the purpose and the content of the course: Suggesting supplementary resources. The concept of morphology; internal and external morphology, the contribution of morphology to systematics,The Primary Structure of a Stem: structural differences between primitive and high plants, the primary structure of a stem, stele types, Cambium in dicotyl stem,The Secondary Structure of a Stem: Gymnosperm wood; the structure of wood in transverse, lengthwise radial and tangential section, Cambium; Cambium with or without layer, year rings, Angiosperm wood; the wood structure in transverse section, its differences from a Gymnosperm wood, structure; wood with scattered and neat holes,The Morphological Structure of a Stem: the morphological differences between gymnosperm and angiosperm (monocot ve dicot) stem, herbaceous and wooden stems, leaf sequencing, branching types,stem metamorphosis,Leaf Anatomy: The internal morphology of leaf in Transverse kesit, monocotyl leaf; its structure in transverse kesit, the situation of vascular bundles, dicotyl leaf; its structure in transverse kesit, the situation of vascular bundles and their differences from monocotyl leaves, Gymnosperm leaf; the morphological differences from Angiosperm leaves,Leaf Morphology: The morphological differences between Gymnosperm ve Angiosperm leaves, the leaf types according to their vessel, tips, sideway patterns and shapes, leaf sequencing, simple and compound leaves, Primary and Secondary Structure of the Root: The anatomical differences between monocot and dicot roots, endodermis, peri and its functions, Casparian strip, the formation of secondary structure, Morphology and metamorphosis of root; main, side and adventive roots and metamorphosis types,Flower I: The parts that consist of Dicotyledon flower; calix, corolla, androecium and gynoecium, the anter structure; young and mature anter, pollen; structure and functions,Flower II: The parts that consist of Monocotyl flower, tepal concept, reproduction in plants, placentation types. Fruit: The concept of true and false fruit, fruit types; dry and fleshy fruits, anatomical and external morphological structure of fruits. Fruit: True and false fruit concept, the anatomical and morphological structure of fruit ,Fruit: fruit types; dry and fleshy fruits, agregatfruits,Seed I: Seed anatomy and morphology; monocotyl and dicotyl seed, testa, radikula, plumula, embryo, cotyledon, endosperm and its functions.Seed II: Seed growth, endosperm formation, anatomical and morphologic differences between monocotyl ve dicotyl seeds. |
| Dersin Amacı | Within the scope of the course, students can idetify, plant organs, stems, leaves, roots, flowers, fruits and the seed at the anatomical and morphological level. They can understand the anatomical and morphological similarities and differences in Gymnosperms and Angiosperms. |
| Dersin Süresi | 2 hour/week |
| Eğitim Dili | ENGLISH |
| Ön Koşul | - |
| Önerilen Kaynaklar | Nur Münevver Pınar, Şenol Alan, Aydan Acar Şahin, 2019. **Atlas of Plant Histology**. Ankara Üniversitesi Yayınları. ISBN: 978-605-136-444-5, İngilizce(Ders kitabı). |
| Laboratuvar | B. 255 Plant Morphology Laboratory |
| Diğer-1 | - |