Course Description Form Plant Anatomy

1. course name	
Plant Anatomy	
2. Course Code	
FCD-1202	
3. Semester / Year	
Second/ 2025	
4. Date of preparation of this description	
15-1-2025	
5. Available attendance formats	
Full-time (theoretical lecture and practical lecture) weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
5hours- units	
7. Course administrator name (if more than one name)	
Gufran Ali Hussien **ghuffranali@uodiyala.edu.iq**	
8. Course Objectives:	
Course Objectives:	**1- Explaining the basic principles of plant anatomy tests** **2- Defining anatomy and how to prepare and stain samples and microscopic slides and prepare them for microscopic examination** **3- Developing the student's ability to know the different tissues, organs and cells of the plant and the functions they perform.** **4- As well as knowing the importance of the plant and the benefit of performing dissection and describing the function of the different tissues** **5- As well as knowing the interpretation of the relationship between plant tissues and their interaction with the forms of general life**

9. Teaching and Learning Strategies	
Strategy	Lecture, participation and discussion. - Discussion and dialogue. - Brainstorming. - Writing reports on the topic. - Question and answer. - Presenting lectures to students in the form of PowerPoint on the projector. - Using the light microscope to identify the plant cell and the types of tissues of some plants.

Course Structure

Theoretical part

week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method
1	2	Introduction to Plant Anatomy	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity performance In the lecture
2	2	Plant Cell/ Non-Living Components of the Cell	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
3	2	Plant Cell/ Living Components	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
4	2	Meristematic plant tissues	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity

5	2	Perennial plant tissues	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
6	2	Exam	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
7	2	Connective tissues	Plant Anatomy	Lectures, discussions and use of data	Daily and monthly exams Evaluation of
8	2	Secretory cells and tissues	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
9	2	Internal structure of the root	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
10	2	Internal structure of the stem	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
11	2	Internal structure of the leaf	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
12	2	Exam	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
13	2	Secondary thickening	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity

14	2	The internal structure of the plant and its relationship to the	Plant Anatomy	Lectures, discussions and use of data show devices	Daily and monthly exams Evaluation of student activity
15	2	Review	Plant Anatomy	Lectures, discussions and use of data	Daily and monthly exams Evaluation of
week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Laboratory tools and equipment	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
2	3	The microscope and how to use it	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
3	3	The plant cell and its non-living contents and	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
4	3	Preparing slides of non-living contents in the	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
5	3	Pits	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
6	3	Meristematic plant tissues and their diagnosis	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
7	3	Exam	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
8	3	Permanent plant tissues and their diagnosis under	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports

9	3	Connective tissues	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
10	3	Preparation of temporary slices of root tissue	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
11	3	Preparation of temporary slices of stem tissue	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
12	3	Preparation of temporary slices of leaf tissue	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
13	3	Exam	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
14	3	Internal Anatomy of a Flower	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports
15	3	Internal Anatomy of Fruits and Seeds	Plant Anatomy	Using Data show- Laboratory	Exam- Discussion- Writing Reports

Course Evaluation.11 .

- Short surprise test
- Semester and daily exams
- - Scientific reports
- 4- Homework

12. Learning and Teaching Resources

Required textbooks (methodology, if any)	Al-Khazraji, Talib Awad and Zaira Bakr Muhammad. 2013. Plant Anatomy: Principles and Applications.
Electronic references, websites	Journal of Botany INTERNATIONAL JOURNAL OF ADVANCED RESEARCH Advances in Bioresearch