Course Description Form

1. Course Name: General plant

2. Course Code: GEBO119

3. Semester / Year: The First autumn / 2023/2024

4. Description Preparation Date: 1/2 /2024

5. Available Attendance Forms: Attended

6. Number of Credit Hours (Total) / Number of Units (Total): (75 hours) (3.5 units)

7. Course administrator's name (mention all, if more than one name)

1- Name: Rayan Fadhel Ahmed
Email: rayanobady79@uomosul.edu.iq
2-Name: Abdullah Kudheer Mohammad

8. Course Objectives

Course Objectives	
(theoretical) 1- The student will broaden the understanding an comprehension of commercial scientific material from the here and now, memorization, analysis, and synthesis, while acquiring the technique in distinction, diagnosis, and discrimination, and providing the student with prior information and general plant material 2- Recognize the names of plants 3- Identify the stages of plant development	(practical) 1- Identify the microscope and its parts 2- Discovering the parts of the plant cell 3- Enabling the student to identify plants

9.Teaching and Learning Strategies

Strategy	(theoretical)	(practical)
	Interactive lecture Brainstorming Dialogue and discussion Assigning tasks and reporting He is assigned to prepare a report entitled from his diligence It is prepared for discussion with students	Assignment to team work Assigning tasks and reporting

10.Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 Theoretical 3 practical	(theoretical) a1 : Learn About the branches of botany (practical) b6 : Identify the microscope and its parts	(theoretical) Botany (practical) The microscope and its components	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
2	2 Theoretical 3 practical	(theoretical) b1 : Enumerate groups of living organisms (practical) b7 : Discover the parts of a plant cell	(theoretical) Aggregates of living organisms (practical) Plant Cell	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance

3	2 Theoretical 3 practical	(theoretical) a2 : Describes the basics of tissue division (practical) b8 : Collect different plant samples and examine them under a light microscope to identify their parts	(theoretical) Plant anatomy (practical) Living components of a plant cell	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
4	2 Theoretical 3 practical	(theoretical) b2 : Shows the inorganic components of the plant (practical) b9 : Detects non-living cell components	(theoretical) Inorganic components in plants and their types (practical) Non-living components of the cell	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
5	2 Theoretical 3 practical	(theoretical) c1 : It stabilizes the organic components in the plant (practical) b10 : Watch explanatory videos about the process	(theoretical) Organic ingredients in the plant (practical) Plant cell division	(theoretical) Auditory methods. Style of writing on the blackboard.	Short exams, assignment of homework, discussions, student

		of cell division		Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	attendance
6	2 Theoretical 3 practical	(theoretical) b3 : He lists the types of natural plants according to their need for water (practical) c5 : Differentiate between types of plant tissues	(theoretical) Factors affecting plant growth (practical) Plant tissues and their types	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
7	2 Theoretical 3 practical	(theoretical) c2 : Shows the minimum temperature (practical) c6 : Examining a plant sample under an optical microscope	(theoretical) Factors affecting plant growth (practical) Collecting various plant samples (plant leaves), examining samples under a light microscope Cultivate it	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom.	Short exams, assignment of homework, discussions, student attendance

				(practical) Assigning tasks and reporting.	
8	2 Theoretical 3 practical	(theoretical) a3 : Little long-day plants (practical) b11 : Knowing their areas of existence and function	(theoretical) Factors affecting plant growth (practical) Permanent tissue	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
9	2 Theoretical 3 practical	(theoretical) a4 : Explains the factors that affect the process of photosynthesis (practical) c7 : Determines the types of roots of different plants	(theoretical) Science and function of plant organs (practical) Radical sum	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
10	2 Theoretical 3 practical	(theoretical) b4 : Explains the importance of	(theoretical) Transpiration (practical)	(theoretical) Auditory methods.	Short exams, assignment

		transpiration (practical) b12: Distinguish between morphologically different types of plants	Vegetative total	Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	of homework, discussions, student attendance
11	2 Theoretical 3 practical	(theoretical) a5 : He is familiar with the characteristics of the vegetative system (practical) c8 : The pollination process and what happens inside the flower	(theoretical) Absorption (practical) Flower	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
12	2 Theoretical 3 practical	(theoretical) a6 : Explains the vascular plants section (practical) b13 : He tests the germination of different seeds by planting them and knowing the type of germination	(theoretical) Plant classification methods (practical) Seed and fruit	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style.	Short exams, assignment of homework, discussions, student attendance

				Electronic class Google Classroom. (practical) Assigning tasks and reporting.	
13	2 Theoretical 3 practical	(theoretical) b5 : Explains plants of the Poaceae family (practical) b14 : Distinguish between different types of plant seeds	(theoretical) Use of monocotyledonous plant families (practical) Seed plants	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance
14	2 Theoretical 3 practical	(theoretical) c3 : Shows plants of the leguminous family (practical) c9 : Determines the extent to which the environment affects the phenotypic and anatomical structure of the plant	(theoretical) Use of dicotyledonous plant families (practical) The effect of the environment on the phenotypic and anatomical structure of the plant	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and	Short exams, assignment of homework, discussions, student attendance

				reporting.	
15	2 Theoretical 3 practical	(theoretical) c4 : Explains the stages of plant growth development (practical) b15 : practical training	(theoretical) Evolution in plants (practical) Collect different plants from within the university campus	(theoretical) Auditory methods. Style of writing on the blackboard. Direct dialogue style. Electronic class Google Classroom. (practical) Assigning tasks and reporting.	Short exams, assignment of homework, discussions, student attendance

11. Course Evaluation

	Evaluation methods	Evaluation date (week)	Degree	Percentage weight%
1	Report 1	fourth week	2.5	2.5
2	Report 2	fifth week	2.5	2.5
3	Short test Quiz (1)	sixth week	2	2
4	Short test Quiz (2)	fourteenth week	2	2
5	Short test Quiz (3)	fifteenth week	1	1
6	Semester test (1)	sixth week	7.5	7.5
7	Semester test (2)	eleventh week	7.5	7.5
8	Final theoretical test	Final semester exams	40	40
9	Practical field project	fifteenth week	5	5
10	Field evaluation	The third and fifth week	2	2
11	Practical short test Quiz (1)	first week	1	1
12	Practical short test Quiz (2)	fourth week	0.5	0.5
13	Practical short test Quiz (3)	fourteenth week	1	1
14	Live drawings and homework	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
15	Final practical test	Final semester exams	20	20

	Total	100	100%	100%

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	General Plant: Dr. Ahmed Mohamed Mujahid, Dr. Mustafa Abdel Aziz, Dr. Ahmed El-Baz Younis, and Dr. Abdel-Rahman Amin (1996). Practical General Plant: Abdullah Hamad Al-Moussawi and Dr. Hussein Ali Al-Saadi (1980)
Main references (sources)	Plant physiology, part one: Dr. Abdul Azim Kazem Muhammad (1985).
Recommended books and references (scientific journals, reports)	All books, scientific journals, and reports specialized in general plants.
Electronic References, Websites	All references and websites concerned with general plants.

Theoretical subject teacher : Dr. Rayan Fadhel Ahmed

Practical subject teacher : Abdullah Kudheer Mohammad

Chairman of the Scientific Committee : Prof. Dr. Muhammad Younis Al-Allaf

Head of the Department of Forestry Sciences : Prof. Dr. Muzahim Saeeed Younis