

Course Description Form Dendrology

1. Course Name:	
Dendrology	
2. Course Code:	
DEND254	
3. Semester / Year:	
1st Semester / 2023-2024	
4. Description Preparation Date:	
1 / 9 / 2023	
5. Available Attendance Forms:	
Attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 Theory + 3 practical / 3.5 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Haees Sayel Jarjes Email: haees_sayel@uomosul.edu.iq Name: Dr. Shahla abdalrazagh Basher	
8. Course Objectives	
<p>Theory :</p> <ul style="list-style-type: none"> -Enabling the student to understand and comprehend the foundations of plant division and an overview of the history of plant division and the stages of its development -The student's familiarity with the vegetative and reproductive parts of the tree -Preparing cadres capable of identifying a knowing methods for diagnosing and classifying forest trees. -Enable the student to name types of forest trees according to the international rules of botanical nomenclature -Enabling the student to know and identify the minor and major taxonomic ranks -Students' familiarity with the types of forest trees, including local and introduced seedless and seedless ones. -Choosing the suitability of forest tree species to various environmental conditions - Enabling the student to use chemical classification in solving problems resulting from phenotypic similarity and diagnosing and distinguishing tree species by their content of chemical compounds. 	<p>Practical :</p> <ul style="list-style-type: none"> •Enabling the student to practically collect and preserve plant models •Preparing qualified cadres to use various methods of diagnosing forest trees •Determine the appropriate type of planting by knowing and identifying the types of deciduous or evergreen trees. •Practical identification of the various parts of the vegetative and reproductive tree • The student should be able to use one of the diagnostic methods practically, directly in the forest

9. Teaching and Learning Strategies					
Strategy	<ul style="list-style-type: none"> -Interactive lecture -Brainstorming -Dialogue and discussion - Assigning tasks and reporting 				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2Theory 3 Practical.	Theory: A1 Learn about the principles and foundations of plant division Practical: A9 Introducing the sources of plant identification- B2How to collect, dry and load plant specimens into the herbarium - Uses tools to collect d	Theory: Principles and foundations of plant division and some division terms Practical: Collect, dry and preserve models	Theory : In-person lectures Practical : In-person lectures with clarification of the sections with pictures and using wood samples in the laboratory	Discussions and interaction in the lecture and a short test
2	2Theory 3 Practical	Theory: A2 is familiar with the objectives of segmentation science and some segmentation terminology A4 recognizes the stages and eras that the science of division passed through practical : A10 Recognizes leaf Definition of leaf - Leaf structure - Understand the arrangement of leaves on the stem- B3 Uses and sees models and paintings of simple and compound leaves and the arrangement of leaves on the stem	Theory: Objectives of plant division and its relationship to other sciences practical : Vegetative characteristics of trees	Theory : In-person lectures Practical : In-person lectures with field visits	Quotes and interaction in the lecture Short test
3	2Theory 3 Practical	Theory: A6 Understands the history of botanical	Theory: A historical overview of the	Theory : In-person lectures with field visits	Short test Direct drawing

		<p>taxonomy practical: A12 Identify leaves - types of leaves according to the shape of the blade B4- Explains the type of leaves in relation to the edge of the blade. C3- Experiments with models and drawings on the shapes of the leaf blade and the shapes of the blade edge.</p>	<p>science of plant division practical : Vegetative characteristics of trees</p>	<p>Practical : In-person lectures with field visits</p>	
4	2Theory 3 Practical	<p>Theory: E3 Identify the foundations of plant evolution and the basic trends of evolution practical : C4 sees leaf venation the characteristics of the leaf surface B5 Apply and watch models and paintings about leaf veining, its types, and the characteristics of the paper surface</p>	<p>Theory: Foundations of plant evolution and basic trends of evolution practical : Reproductive characteristics of trees</p>	<p>Theory : In-person lectures with field visits Practical : In-person lectures with field visits</p>	<p>Field evaluation Direct drawing</p>
5	2Theory 3 Practical	<p>Theory: A3 identifies the major and minor taxonomic ranks practical : A13- Identify the flower - the structure of the flower. C6- Draw and show the symmetry in the flower - the arrangement of the flowers.</p>	<p>Theory: Major and minor taxonomic ranks practical : Reproductive characteristics of trees</p>	<p>Theory : In-person lectures with field visits Practical : In-person lectures with field visits</p>	<p>Short test Direct drawing</p>
6	2Theory 3 Practical	<p>Theory: B1 Uses correct scientific names practical : A14: Gets acquainted with unlimited inflorescences - limit inflorescences - familiarizes with</p>	<p>Theory: Theoretical: Principles of botanical nomenclature practical : Reproductive characteristics of trees</p>	<p>Theory : In-person lectures with field visits Practical : In-person lectures with field visits</p>	<p>Short test Direct drawing</p>

		methods for studying floral squares			
7	2 Theory 3 Practical	Theory: A5 Choose one of the modern classification system Practical: A15: Identify fruits - types of fruits - characteristics that help in classification - branches - bark	Theory: Common classification systems in the world practical : Reproductive characteristics of trees	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
8	2 Theory 3 Practical	Theory: C1 explains the most important diagnostic methods used practical : A16 Learning about plant diagnosis methods - Familiarity with the use of plant keys - Viewing types of forest trees on field tours	Theory: Plant Identification practical : Use the keys to identify some tree species	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
9	2 Theory 3 Practical	Theory: C2 Proposes classification traits and clues family practical : A17 Identify some seed families - Cycads - Ginkgoaceae - Taxus Taxodium - Pine	Theory: Characteristics, classification indicators and their types practical : Some gymnosperm families	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
10	2 Theory 3 Practical	Theory: runs seminars on most important characters used in plant classification practical : A18 is devoted to the Cypress family - field observation - to identify the types of trees belonging to the seed bed.	Theory: Characteristics adopted in plant classification practical : Some gymnosperm families	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
11	2 Theory 3 Practical	Theory: E1 Justifies the importance of using chemical classification and byproducts	Theory: Principles of chemical classification practical :	Theory : In-person lectures with field visits Practical : In-person lectures	Short test Direct drawing

		practical : A19 Gets acquainted with the group of cat bearing inflorescence he is familiar with the willow family - the hickory family	Field observation	with field visits	
12	2Theory 3 Practical	Theory: E2 determines the appropriate classification for the plant queen practical : A20 learns about the beech family - the mulberry family - C7 conducts a field visit	Theory: Classification of plant kingdom practical : Some families are angiosperms	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
13	2Theory 3 Practical	Theory: Compares monocots Dicotyledons practical: A21 Get to know the Almas family, the Tawouk family, the A Janar (plane) family	Theory: Gymnosperms practical: Some of families are angiosperms	Theory : In-person lectures with field visits Practical: In-person lectures with field visits	Short test Direct drawing
14	2Theory 3 Practical	Theory: A7 Identify the most important families of Dicotyledons practical: A22 Recognizes the Rosaceae family, the Butterfly family, and Acacia family	Theory: Angiosperms Practical: Some of families are angiosperms	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Short test Direct drawing
15	2Theory 3 Practical	Theory: A23 recognizes some angiosperm families practical : D2 conducts field visit to learn about types of forest trees	Theory: Some of families are angiosperms Practical: Field observation	Theory : In-person lectures with field visits Practical : In-person lectures with field visits	Semester exam 2, final exam

11. Course Evaluation

	Evaluation Methods	Evaluation Date	Degree	Relative weight %
	Final report theory + pract. Report	Theory 15 weeks Pract. 1-15 week	7 Theory + 6 pract.	% 13
	Short exam (1)	Week (3)	4 Theory + 2 pract.	% 6
	Half exam (theory +	Week (9)	10 Theory +	% 15

	pract.)		5 pract.	
	Short exam (2)	Week (12)	4 Theory + 2 pract.	% 6
	Final exam (practical)	Exam pract.	20	% 20
	Final exam (theory)	Exam theory	40	% 40
			100	% 100
12. Learning and Teaching Resources				
Required textbooks (curricular books, if any)		The book Wood as a Raw Material, by George Tsumis, translated by Dr. Walid Aboudi Kassir and others - University Press Directorate - 1985		
Main references (sources)				
Recommended books and references (scientific journals, reports...)		Wood technology book - written by Dr. Latif Haji Dr. Samir Fouad		
Electronic References, Websites				

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