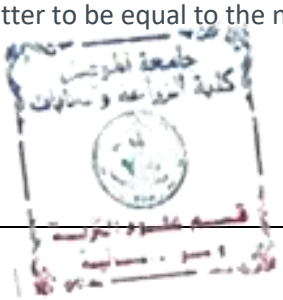
MODULE DESCRIPTION FORM

Module Information					
Module Title	**BIODIVERSITY**			**Module Delivery**	
Module Type	**Basic learning activities**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**BIO1070**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level	4		**Semester of Delivery**	2	
Administering Department	Type Dept. Code		**College**	Agriculture and forestry college	
Module Leader	Dr. Rand Abdalhade Gazal Dr. Hesham Saadalden Younes		**e-mail**	Randaltaee44@uomosul.edu.iq Heshamsaad293@uomosul.edu.iq	
Module Leader's Acad. Title	Master		**Module Leader's Qualification**	Teacher	
Module Tutor	Dr. hesham saad aldeen **Dr.Rand Abdalhadi Ghazal**		**e-mail**	E-mail: harbawee79@uomosul.edu.iq	
Peer Reviewer Name			**e-mail**	E-mail:	
Scientific Committee Approval Date	01/02/2025		**Version Number**	1.0	

Relation with other Modules			
Prerequisite module	**SOIL MICROBIOLOGY**	**Semester**	1
Co-requisites module	**BIOSAFETY and SECURITY**	**Semester**	2

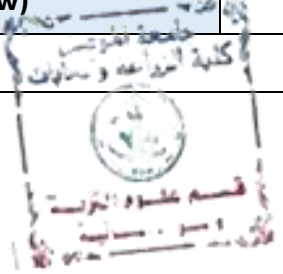
Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	1. Enable students to appreciate the importance of biodiversity conservation in addressing environmental challenges and climate change. 2. Provide students with fundamental concepts of biological diversity and the role of living organisms in ecosystems.
Module Learning Outcomes	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 1- Interactive lecture 2- Brainstorming 3- Dialogue and discussion 4- Field Training



	5- Practical exercises 6- Field project 7- Interactive lectures 8-Brainstorming 9- Self-education The student should be able to: LO#1: Identify classifications of living organisms and patterns of biological diversity in various environments. LO#2: Understand the evolutionary and genetic mechanisms that contribute to the emergence of biodiversity over time. LO#3: Evaluate threats to biodiversity and analyze the impact of human activities on ecosystems. LO#4: Propose suitable strategies for biodiversity conservation and the sustainable use of natural resources.
EE#DS	Indicative content includes the following: Introduction to Soil Physics • Soil as a natural resource. [SSWL=30 hrs] Soil Survey and classification - [SSWL=20 hrs] Revision problem classes [SSWL=6 hrs] Fundamentals [SSWL=44 hrs] Total hrs = 105 = SSWL - (Exam hrs) = 109 - 4 = 105 hr (Time table hrs x 15 weeks)

Learning and Teaching Strategies	
Strategies	- Interactive lecture - Brainstorming - Dialogue and discussion - Field Training - Practical exercises - Field project - Interactive lectures - Brainstorming

Student Workload (SWL)			
Structured SWL (h/sem)	63	**Structured SWL (h/w)**	4
Unstructured SWL (h/sem)	62	**Unstructured SWL (h/w)**	4
Total SWL (h/sem)	**125**		



Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction to Biological Diversity
Week 2	Taxonomy and Scientific Nomenclature
Week 3	Genetic Diversity and Evolution
Week 4	Ecological Diversity and Ecosystems
Week 5	Measuring Biodiversity and Its Indicators
Week 6	Factors Affecting Biological Diversity
Week 7	Mid-term Exam
Week 8	Environmental and Economic Value of Biodiversity
Week 9	Current Threats to Biodiversity
Week 10	Species Extinction and Conservation Strategies
Week 11	Biodiversity in Aquatic Ecosystems
Week 12	Biodiversity in Terrestrial Ecosystems
Week 13	Climate Change and Its Impact on Biodiversity
Week 14	Biodiversity and Sustainable Development
Week 15	Natural Resource Management and Sustainable Use
Week 16	Future Directions in Biodiversity Enhancement

Delivery Plan (Weekly Seminar. Syllabus)	
	Material Covered
Week 1	Future Directions in Biodiversity Enhancement
Week 2	Collection and Classification of Plant and Animal Samples
Week 3	Practical Applications of Scientific Nomenclature in the Lab
Week 4	Genetic Diversity Measurements and DNA Analysis Techniques
Week 5	Field Survey of Ecosystems (Forest or Agricultural)
Week 6	Biodiversity Assessment in Soil and Water Samples
Week 7	Monitoring Environmental Threats (e.g., Pollution and Biological Invasions)
Week 8	Community Analysis of Biotic Assemblages
Week 9	In-situ and Ex-situ Conservation Techniques
Week 10	Studying the Impact of Climate Change on Biotic Communities
Week 11	Field Visit to High-Biodiversity Areas
Week 12	Data Documentation and Analysis Using Statistical Software
Week 13	Designing Models for Biodiversity Conservation and Sustainable Use
Week 14	Developing Management Plans for Species Protection
Week 15	Presentation and Discussion of Research Findings and Practical Reports
Week 16	Future Directions in Biodiversity Enhancement

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts		Yes
Recommended Texts		No
Websites	Chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cbd.int/iyb/doc/celebrations/iyb-egypt-agrobiodiversity-ar.pdf	

Grading Scheme			
Group	**Grade**	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	90 - 100	Outstanding Performance
	B - Very Good	80 - 89	Above average with some errors
	C - Good	70 - 79	Sound work with notable errors
	D - Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	(45-49)	More work required but credit awarded
	F – Fail	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.			

Subject Lecturer
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Khalid Anwar Khaled

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