MODULE DESCRIPTION FORM

Module Information					
Module Title	**BIODIVERSITY**		**Module Delivery**		
Module Type	**Core learning activity**		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar		
Module Code	**BIO1070**				
ECTS Credits	**5**				
SWL (hr/sem)	**125**				
Module Level	1	**Semester of Delivery**		2	
Administering Department	SSWR1969, PLPR1966, HOLA1974, FORE1964, FOSC1965, FICR1973, ANPR1964, AGEC1979, AETT1979, AGME1986	**College**	AGFO1964		
Module Leader	**zwaid fathiy abd** Omar Dheyaa Mohammed Asmaa Mohammed Adil **Moyassar Mohammed Aziz** **Nofal Issa Mohamed** **Taha Mohammed Taki** **Firas Kadhim Dawoo Aljuboori** **Khaled Anwer Khaled ALKHALED** **Talal Saeed Hameed** Sumood Husain Ai Al-Hadedy	**e-mail**	**zu-kh1985@uomosul.edu.iq** **dr.omaralmallah@uomosul.edu.iq** **asmaama@uomosul.edu.iq** **moyassar_aziz@uomosul.edu.iq** **nofelemh@uomosul.edu.iq** **tahataqi@uomosul.edu.iq** **firasaljuboori@uomosul.edu.iq** **khalid.anwar31@uomosul.edu.iq** **stalal1982@uomosul.edu.iq** **sumod_husain@uomosul.edu.iq**		
Module Leader's Acad. Title	Professor **Assistant Professor**	**Module Leader's Qualification**		**Ph.D.** **MSc.**	
Module Tutor	Omar Ghiyath al-Din Abdul Ghafoor	**e-mail**	omar.almzori@uomosul.edu.iq		
Peer Reviewer Name	Saja Salem Ibrahim Alawi	**e-mail**	saja.1988@uomosul.edu.iq		
Scientific Committee Approval Date	15/10/2024	**Version Number**	1.0		

Relation with other Modules			
Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

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 LOs	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.**
Indicative Contents	Indicative content includes the following. Theoretical The course covers fundamental concepts of biological diversity and taxonomic classifications, extending to ecosystem studies and methods for species and habitat conservation, with a focus on current threats and future challenges. Total hrs = 125 = SSWL - (Exam hrs) = 63-3 = 60 hrs (Time table hrs x 15 weeks)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. **(Interactive Lectures)** 2. **(Project-Based Learning)** 3. **(Case Studies)** 4. **(Field Trips)** 5. **(Group Discussions and Presentations)**

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)	4 and 11	LO#1 and LO#2
	Assignments	2	10% (10)	2 and 13	LO#1 and LO#3
	Seminar	1	10% (10)	All	All
	Report	1	10% (10)	14	LO#1, LO#2 and LO#4
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO#1, LO#2 and LO#3
	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 Laboratory 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 (Community Analysis)
Week 9	In-situ and Ex-situ Conservation Techniques (In-situ & Ex-situ)
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

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	Gaston, K. (2010) Chapter 2: Biodiversity. In N.S. Sodhi & P. R. Ehrlich, Conservation Biology for All (pp. 27 - 43). Society for Conservation Biology.	-
Recommended Texts		-
Websites		

Grading Scheme
مخطط الدرجات

Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (50 - 100)	**A** - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX** – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(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.

جامعة الموصل
كلية الزراعة والغابات
قسم علوم الغابات

أ.د. صهود حسين علي
رئيس القسم

أ.م.د. عمار حاكم محمد
رئيس اللجنة العلمية

كلية الزراعة والغابات
أمانة مجلس الكلية