## Republic of Iraq The Ministry of Higher Education & Scientific Research



**University: Al-Muthanna** 

College: Science
Department: Biology

Stage: PhD

Lecturer name:Ali Al-Fanharawi&

Academic Status: Prof. Qualification: PhD

Place of work: A.M. Science college

Teaching plan for the Second semester form

<b>Course Instructor</b>	Ali Abdulhamza Al-Fanharawi					
E_mail	alialfanharawi@edu.mu.iq.					
Title	Aquatic Ecology.					
Course	First semester.					
Coordinator						
Course Objective	<ol> <li>Student will gain understanding of main concept in Aquatic ecology, including definition, types, process, classification etc.</li> <li>Describe the structure of an aquatic ecosystem</li> <li>Describe the roles of producers, consumers, and decomposers in various aquatic ecosystems and identify their trophic levels</li> </ol>					
	4- Knowledge about current issues in water quality and water resources.					
Course Description	<ul> <li>5- Feels important and responds effectively to maintain it.</li> <li>1- We begin with the chemical and physical properties of water that fundamentally regulate the diverse nature of aquatic habitats.</li> <li>2- Recognize about aquatic chemistry and factors controlling nutrient cycling.</li> <li>3- Progress from small-scale stream ecology to large-scale open ocean habitat.</li> <li>4- Hydrology and Physiography of Wetland Habitats.</li> <li>5- Study the Coral Reefs ecology and ocean ecology .</li> </ul>					
Textbook						
References	Limnoecology, Lampert and Sommer, 2007 Freshwater Ecology, Dodds and Whiles, 2010 Ocean Ecology, J. Emmett Duffy, 2021					
Course	Term Tests	Laboratory	Assess	Semester	Final Exam	
Assessment	(25%)	-	(5%)	First	(70%)	
General Notes						

## Republic of Iraq The Ministry of Higher Education & Scientific Research



**University: Al-Muthanna** 

College: Science Department: Biology

**Stage: HSS** 

Lecturer name:Ali Al-Fanharawi,

Academic Status: Assis. Prof.

**Qualification: PhD** 

Place of work: Science college

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## **Teaching plan for the Second semester form**

		Teaching plant for the become semester to	
$\mathbf{W}$	$\mathbf{D}$	Topics Covered	Lab.
			Experiment
			Assignments
1		Continental Aquatic Systems	
2		Properties of Water	
3		Movement of Light, Heat, and Chemicals in Water	
4		Groundwater Habitats	
5		Wetland Habitats	
6		Flowing Water, River ecology	
7		Discussions	
8		Lakes and Reservoirs	
9		Life in Water	
10		Water Relations	
11		Species Interactions	
12		Open Ocean	
13		Coral Reefs	
14		Extreme Habitats	
15		Discussions	

**Instructor Signature:** 

**Dean Signature:** 

Prof. Dr. Ali Abdulhamza Al-Fanharawi

Prof. Dr. Kolah Kani Jassim