



## Teaching plan for the First semester form

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<b>Title</b>	Ecology.				
<b>Course Coordinator</b>	First semester.				
<b>Course Objective</b>	The student learns: Basic facts, concept of Environment, its main branches, its importance, environmental zones, ecosystem and components, relationship between biota, sample collection and analysis.				
<b>Course Description</b>	Ecology as a concept, relation to other science, ecology classification, ecosystem, gaseous and sedimentary cycles, limited factors, tolerance laws, food chains and nets, productivity, population and communities, ecosystem succession.				
<b>Textbook</b>	Ecology and pollution. Hussein Al-Saadi, 2002				
<b>References</b>	Ecology, Hattog & Ubaidah, 2009 Basic concepts of ecology and pollution. Ihsan al-Gohary, 2019 Essentials of Ecology. Miller and Spoolman, 2009				
<b>Course Assessment</b>	Term Tests	Laboratory	Assess	Semester	Final Exam
	(20%)	(10%)	(10%)	First	(60%)
<b>General Notes</b>	Field trips required				



### Teaching plan for the Second semester form

W	D	Topics Covered	Lab. Experiment Assignments
1		Introduction, Definition of ecology and its relation to other science.	Introduction to ecology lab., types of environment and ecosystems. Ecology lab. safety.
2		Branches of ecology, Aquatic ecology and classification, Terrestrial ecology and classification	Laboratory equipment, Air temperature, pressure and measurement
3		Ecosystem and components	Air humidity, rain measurement
4		Limited factors and tolerance laws	Wind, light intensity Traps and nets
5		A biotic factors as limited factors	Water flow and measurement
6		Food chains and food nets	Soil types, soil moisture measurement
7		Productivity and measurement methods, Environmental pyramids	Analysis of soil textures by two methods
8		Gasous and sedimentary cycles	Productivity and plant area surface measurement
9		Population, distribution, structures	Study of ecosystem
10		Communities, classification and analysis	Types of food chain in the environment
11		Ecosystem diversity: Freshwater ecosystems	Population size measurement
12		Ecosystem diversity: Terrestrial ecosystem	Predator prey relationship
13		Environmental succession, water and land succession, Ecosystem development.	Visit to the meteorological station.
14		Local Environment: case study	Visit to the natural ecosystem
15		Open Lecture	-

Instructor Signature:

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Assis. Prof. Dr. Ali Abdulhamza Al-Fanharawi

Prof. Dr. Laith Abdul Hassan Mohamed J.