المرحلة الثانية

الفصل الدراسي الأول

Delivery Plan (Weekly Syllabus)	
Week	**Material Covered**
Week 1	Definition of ecology, development, importance and relationship to other sciences, levels of study of ecology
Week 2	Biological communities, plants, animals, microorganisms, plant communities
Week 3	Plant species as an ecological unit, taxonomic orientation, biological division of the species, environmental decline, and species overlap.
Week 4	plant in the ecosystem of planet Earth, its environmental components
Week 5	Solar energy, its transformations, biogeochemical cycles in the ecosystem
Week 6	Plant in the biosphere, its role, location, level in the energy pyramid, its relationship with consuming and decomposing organisms
Week 7	The biosphere, climate factors, factors affecting it, methods of gaining and transferring heat, heat exchange, temporal and locational differences in temperatures, the effect of heat
Week 8	Light, forms of radiation, local differences in light intensity, temporal variations of radiation, its effect on plants.
Week 9	Winds, their effects, types, the effect of vegetation on them, windbreaks, fires and their effects.
Week 10	Soil factor, air, evaporation force, soil revival, the effect of vegetative cover on the development of soil properties
Week 11	The water factor, the division of land areas on the Earth, rain, forms of soil water, plants' adaptation to water factor.
Week 12	The atmosphere, climatic zones, plant formations, and their distribution on the Earth's surface
Week 13	Vegetation cover, its types, steps of development, plant succession, aquatic succession
Week 14+ 15	Environment and plant communities in Iraq, topography, geographical areas, climatic conditions and plant formations
Week 16	**Exam**

بيئة نبات عملي

Delivery Plan (Weekly Lab. Syllabus)	
week	**Material Covered**
Week 1	Introduction to practical lessons in taking measurements, writing reports, and office research
Week 2	Units and measurements used in plant statistics and some arithmetic exercises.
Week 3	Studying the effect of climate on plants and devices for measuring climatic factors
Week 4	Studying the relationship of plants to environmental factors and learning about some phenomena during a field tour
Week 5	Measuring soil moisture and its relationship to plant growth and density
Week 6	Measuring salinity and its effect on the nature and distribution of vegetation.
Week 7	Measurement of plant mass, green matter and plant residues
Week 8	Study of vegetation cover in terms of numerical density and diversity using the ascending squares method
Week 9	Study of vegetation cover in terms of the number and percentage of species in a plant community using the linear section method
Week 10	Study of plant stratification in a forest community and the proportion of plant species
Week 11	Measuring the height of plants and shrubs by the direct method and trees by the indirect method and classifying them by class
Week 12	Measuring plant density and leaf coverage of trees using a leaf density meter
Week 13	Study of plant ecology in terms of the relationship of plants to other organisms and their class distribution
Week 14	Studying the environment and characteristics of water bodies and the diversity of plants and dividing them according to the nature of their growth there
Week 15	Discussing research, reviewing reports, and evaluating practical results

بيئة نبات