

Republic of Iraq

The Ministry Of Higher
Education

& Scientific Research

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



University: Diyala

College: Agriculture

Department: Soil Science and
Water Resources

Stage: Second

Lecturer name: Prof.Dr. Faris
Mohammed Suhail

Qualification: PhD.

Place of work: Coll. Of
Agriculture

Flow up of implementation celli pass play

Course Instructor	Prof.Dr. Faris Mohammed Suhail				
E-mail	farissuhail@uodiyala.edu.iq				
Title	Principles of microbiology				
Course Coordinator	first				
Course Objective	Introduce students the basics of microbiology according to the vocabulary of substance of microbiology for students of second stage of the students Soil and water resources department .				
Course Description	Included vocabulary material Definition of microbiology and its inception and its development stages, location taxonomic of microorganisms and name it, and nutrition microbiology and definition bacteria forms and composition, the definition fungal described the importance and the installation of the fungal cell, and then identify the algae types and their reproduction and viruses .				
Textbook	1- Principles of microbiology. Dr. Faaz Aziz al-Ani and Dr. Amin Suleiman Badawi. 2000 .University of Mosul. 2- microbiology. Authoring a committee of my teaching Department of Life Sciences - Baghdad University, Dar al-Hikma for printing and publishing in 1991				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	20%	15%	5%		60%
General Notes					

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week	Date	Topics Covered	Practical Part
1		Definition and development of microbiology	Identify the microbiology laboratory – Instruments and tools- general guidelines and safety methods .
2		Taxonomy site of microorganisms in the world of biology	Sterilization , the microscope , type of microscope
3		Naming microbiology - Classification of microbiology	Culture media , types, methods of preparation
4		Bacteria, presence, components, forms	Sampling methods of microorganisms- Isolate microorganisms
5		The bacterial cell wall and its components, cytoplasmic membrane and its components	
6		Permeability and the transition across membranes cytoplasmic	Diagnosis of bacteria , shape of bacteria
7		Bacterial flagella, pilli	Fungi, Diagnosis of fungi , shape of fungi . Diagnosis of molds and yeasts
8		Cytoplasm, nucleic acids	Staining of bacteria , simple staining
9		Objects moderation, Spores, plasmids, cysts	
10		Fungi, described the fungus, its importance	Compound staining , spore staining
11		Installation of the fungal cell, the cytoplasm and its contents	
12		Algae, types, presence, growth and reproduction	Mobility of bacteria hanging (drop preparation)
13		Microbiology nutrition, reproduction microbiology	The minimum inhibitory concentration using antibiotics .
14		viruses	

Instructor's signature
Prof.Dr. Faris Mohammed Suhail
15 / 1 / 2025

Dean's signature
Prof. Dr. Raaed Ibrahim Khalil
15 / 1 / 2025