



Course Weekly Outline

Course Instructor	Basem rahem bader				
E_mail	basemrbader@uodiyala.edu.iq				
Title	Fertilizer technologies				
Course Number	scecod				
Credits:	2				
Lectures Houres:	2				
Practical Hours:	Not found				
Course Objective	The aim is to introduce students to the principles and techniques used in manufacturing and preparing fertilizers, methods of expressing them, and how to calculate the percentages added to the soil				
Course Description	Fertilizer technologies are defined as the techniques used to express fertilizers, how to manufacture them, methods of addition, their behavior within the soil, and their importance to plants				
Prequests					
Textbook References	<p>Ali, Nour al-Din Shawqi, 2010, Fertilizer Technologies and Their Uses, College of Agriculture, University of Baghdad. (under publication)</p> <p>2- Al-Naimi, Saadallah (1999) Fertilizers and soil fertility. Ministry of Higher Education and Scientific Research, University of Mosul.</p> <p>3- Havlin, J.L., Tisdale, S.L., Nelson, W.L., and Beaton, J.D. 2005, Soil Fertility and Fertilizers, 5th edition. USA.</p> <p>4- Hassan, Nouri Abdel Qader, Hassan Al-Dulaimi, and Latif Al-Ithawi, 1990. Soil Fertility and Fertilizers, Ministry of Higher Education and Scientific Research. Baghdad University.</p> <p>1. 5- Awad, Kazem Mashhout, 1984. Practical tests of fertilizers and soil fertility. Albasrah university</p>				
Course Assessment	Term Test	Laboratory	Quizzes	Project	Final Exam
	40%	10%	10%	40%	60%
General Notes					

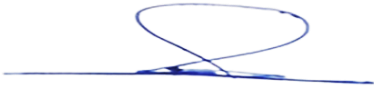
University: Diyala
College: Agriculture
Department: Soil Science and Water Resources
Stage: 4th
Lecturer name: basem rahem bader
Academic Status: prof
Qualification: : ph.d
Place of work: Coll.of Agriculture

Republic of Iraq
The Ministry of Higher Education & Scientific Research



Course weekly Outline

week	Date	Topics Covered	Practical Part
1	2022/2/20	Fertilizers, their types and classification	Fertilizer technologies Fertilisers The chemical principles associated with fertilizers
2	2 /27	Nitrogen fertilizers	Nitrogen Simple nitrogen fertilizers
3	3 / 6	Phosphate fertilizers.	Phosphorus Phosphate fertilizers Simple mineral phosphate fertilizers
4	3 /13	Fertilizers containing potassium	Potassium Potash fertilizers The most important potassium fertilizers used to fertilize agricultural lands Sulfur Sulfur fertilizers
5	3/ 20	Sulfur, calcium and magnesium fertilizers	Micronutrient fertilizers
6	3/ 27	Micronutrient fertilizers	Iron fertilizer Fe Manganese Fertilizers Mn
7	4 / 3	Micronutrient fertilizers	Zinc fertilizers Zn
8	4 / 10	Biol Nutrients, water use and other interactions	
9	4/ 17	Fertilizer evaluation and mixing	boron fertilizers Copper Fertilizers Cu Molybdenum Fertilizers Mo
10	4/24	Nutrient management basics	Compound or mixture fertilizers Advantages of compound fertilizers
11	5 / 1	Economics of using fertilizers	terminology related to compound and mixed fertilizers
12	5 / 8	Environmental problems associated with the use of fertilizers	Organic fertilizer Sources of organic fertilizers Conditions and specifications of good organic fertilizer
13	5 /15	Optimal use of chemical fertilizer technologies in Iraqi agriculture	Calculations of the amount of added fertilizers
14	5 / 22	Semester second exam Fertilizer analysis	Methods of adding solid fertilizers
15	5/29		Compare and discuss results

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Instructor Signature:

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