Republic of Iraq
The Ministry of Higher Education & Scientific Research

University: Diyala
College: Agriculture
Department:
Stage:
Name:
Academic Status:
Qualification: PhD.
Place of work:Coll. Of Agriculture

Course Weekly Outline

Course Instructor	Prof. Dr. Raad Abdel-Kareem Hamdan Al-Tamimi				
E_mail	raadaltamimi@uodiyala.edu.iq				
Title	Soil Salinity				
Course Number	**SOIS310**				
Credits: **Lectures Houres:** **Practical Hours:**	3.5 2 3				
Course Objective	Studying the spread of salinity in Iraq and the world and its impact on agricultural production - identifying sources of salts and means of transporting them - classifying and naming salts affected soils - the effect of salinity on plant growth - quality of irrigation water – salinity control and methods of coexistence with it.				
Course Description	Sources of salt - means of transporting salts - formation conditions of salts affected soils - physical and chemical properties of salts accumulated in the soil - chemistry of salts affected soils - classification of salts affected soils - effect of salinity on plant growth - tolerance of crops to salinity - quality of irrigation water - coexistence with salinity				
Prequests	Soil Chemistry – Fundemental of Soil Science				
	- A. Al-Zubidi. 1989, Soil Salinity-Theoritical and Practical Fundumentals, Ministry of Higer Education, Iraq.				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As (20%)	15	As (5%)	----	As (60%)
General Notes					

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University: Diyala
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Department: Soil Sci. & Water Reso.
Stage:
Name: Raad A. H. Al-Tamimi
Academic Status: Prof.
Qualification: PhD.
Place of work:Coll. Of Agriculture

Course weekly Outline

week	Date	Topics Covered	Practical Part
1	28/1 - 1/2	Distribution and spread of salinity in Iraq and the world	collection and preperation soil samples of salts afffected soils
2	4-8/2	Sources of salts components	Salinity measurement methods - saturated paste
3	11-15/2	Means and mechanisms for transporting salts	Salinity measurement methods - diluted suspension
4	18-22/2	Soil formation conditions of salts affected soils and salt accumulation cycles.	Salinity measurement methods - gravimetric method
5	25-29/2	Factors and conditions responsible for the formation and spread of salt-affected soils	Calculating the amount of salts in the soil
6	3-7/3	First Exam.	Practical Exam/1
7	10-14/3	Chemical and physical properties of salts accumulated in the soil	The effect of the type of salts on the germination of seeds of some plants
8	17-21/3	Phases of salt accumulation in soil, cation exchange capacity in salts affected soils	The effect of the type of salts on the germination of seeds of some plants
9	24-28/3	Methods of expressing soil salinity	The effect of the type of salts on the germination of seeds of some plants
10	31/3 - 4/4	Classification and nomenculture of soils affected by salts	The effect of salinity on plant growth
11	7-11/4	The effect of soil salinity on plant growth	Phenotypic changes in plants due to salinity
12	14-18/4	Semester exam 2	Practical Exam/2
13	21-25/4	Indicators used to determine plant resistance to salinity	Evaluation of irrigation water quality
14	28/4-2/5	Irrigation water quality	Irrigation water classification systems
15	5-9/5	Controlling of soil salinity and ways to live with it	The relationship between salinity and sodicity

Instructor Signature: **Dean Signature:**