

Republic of Iraq
The Ministry of Higher
Education
& Scientific Research



University: Diyala
College: Agriculture
Department: Horticulture and landscaping
Stage: third Class
Lecturer name: Othman Khalid Alwan
Scientific title: Professor
Qualification: PhD
Place of work: College of Agriculture

Flow up of implementation celli pass play

Course Instructor	Othman Khalid Alwan				
E-mail	Othmanalawn@uodiyala.edu.iq				
Title	Design and analysis of agricultural experiments				
Course Coordinator	First semester (fall)				
Course Objective	The course examines the importance of agricultural experiments and how to develop their own designs				
	It includes knowledge of statistical analysis for each experimental design				
Course Description	Knowing the features of each design according to the factors that are to be studied				
	Methods of statistical analysis using manual methods or using a manual calculator				
Textbook	Study the types of modern software for statistical analysis for each experimental design.				
	Study the possibility of implementing a field experiment with one of the designs and analyze it statistically				
Course Assessments	1- Design and analysis of agricultural experiments. 1980. Dr. Khasha Mahmoud Al-Rawi and Dr. Abdul Aziz Muhammad Khalaf Allah. College of Agriculture and Forestry. University of Al Mosul . Iraq				
	2- Statistics and experimental design. 2011. Dr. Shaker Musleh Al-Muhammadi and Dr. Fadel Musleh Al-Muhammadi. Anbar University. Iraq				
General Notes	3- Statistical SPSS - SAS - GEN.STAT				
	Theoretical semester tests %	Practical semester tests %	Quizzes %	Final practical test %	Final Exam %
	(25%)	(10%)	(5%)	20%	(40%)
Final grade 100%					

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The Week	The date	Topics Covered	Practical part	Notes
1		Introduction to the design and analysis of agricultural experiments,	Knowledge of the vocabulary of design and analysis of agricultural experiments	
2		The nature of the statistical symbols used in. The basic rules for designing scientific experiments - the requirements for a good experiment	Knowledge of statistical symbols and steps for implementing the experiment	
3		Statistical tests required to be performed during and after statistical analysis	Knowledge of statistical tests and how to calculate them	
4		Experimental designs for one-factor experiments- Completely randomized design-	Knowledge of design and reasons for using it	
5		Completely randomized block design: Missing data and how to estimate them - The relative efficiency of this design -	Knowledge of design and reasons for using it	
6		Latin square design	Knowledge of design and reasons for using it	
7		The first exam for the theoretical part	Knowledge of design	
8		Participation of third-stage students with fourth-stage students in choosing the appropriate design according to the factors studied for the fourth-stage student's	Knowledge of design and reasons for using it	
9		Factorial experiments - factorial experimental designs - complete randomized design	Knowledge of design and reasons for using it	
10		Randomized complete blocks Design	Knowledge of design	
11		Factorial experimental designs – using a Latin square design	Knowledge of design and reasons for using it	
12		Split-plot Designs	Knowledge of design	
13		The second exam for the theoretical part	Knowledge of design	
14		Third stage students participate with fourth stage students on how to take the measurements required for	Knowledge of design and reasons for using it	
15		Analysis of agricultural experiments according to statistical analysis programs using the computer - - SPSS - program - genstat.	Teaching students how to use statistical analysis programs	

Teacher's signature
Prof. Dr. Othman Khalid Alwan
15/1/2025

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