Course description form

1. Course Name
Design and analysis of agricultural experiments
2. Course Code
DAAE302
3. Semester/year
(Second semester (fall 2024-2023 The second phase
4. Description Preparation Date
2024/2/1
5. Available attendance forms
Presence
6. (Number of study hours (total)/number of units (total
theoretical + 3 practical / 3.5 units 2
7. Name of the course administrator (if more than one name is (mentioned
M. Raghad Naseer Walid :Name M. M. Nahid Sharif Omar

8. objectives Course	
:Practical Enable the student to become familiar with the method of collecting data Classify them and choose the appropriate design for them if they are for one characteristic characteristics and then Or for two or more analyze them to determine the significance of the results ،or not	**Objectives of the study subject** :theoretical - Enabling the student to understand and understand what is related to designing experiments important Enabling the student to know the most - .methods in designing experiments - Enable the student to know the nature of data, its components and features The most important and appropriate designs for .analyzing this data Enabling the student to become familiar with methods of d classifying datacollecting an .For the purpose of experiment design and analysis - Empowering the student with his ability to know the most important designs in what they were

	– The data is placed in a simple table or a complex table significance of the results The student can judge the according to hypothesis testing

9. Teaching and learning strategies

:Practical – Adaptation through teamwork to reveal leadership skills. – Adapt tasks and reports to learn about their mental skills	:My theory Interactive lecture – Brainstorming – Dialogue and discussion – Adapt tasks and reports – - a scientific visit to Conducti private research centers Designing and analyzing experiments a calculating centers	**The strategy**

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
exams, Short assignments, discussion	Auditory methods Writing style on the blackboard Dialogue style Direct	Introduction to experimental design	A1He knows an introduction to Design of experiments definition of research) Applying the scientific method and analysis (variance	2 Theoretical	1

A short test with homework	Assigning tasks And report	Statistical metrics	D3Estimates statistical metrics or Centering) mediating by solving examples (on that	Practi3 cal	
Short exams, assignments, discussions	Auditory methods Style of writing on the blackboard Dialogue style Direct	Basic rules in Design of experiments	B1Familiar with the most important rules Basics in designing experiments Learn about the most) important rules and experience (requirements	2 Theore tical	2
Solve examples with homework	Assigning tasks And report	Statistical metrics	D3 Estimates metrics Statistics (dispersion or .(difference (Example solutions)	3 practic al	

Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	factor –Single experiments	B2 Proficient in related experiments The Worker Single .(randomized design) The complete definition of design and its features And its flaws And use it in case Register a view One and appreciation Effects following a method Squares Minor	2 Theoretical	3
Solve examples with homework solutions	Assigning tasks report And	Statistical metrics	D3 estimates statistical metrics Dispersion or) disagreement in solving examples (on that	Practi3 cal	
Semester exam 1 with a final exam	Auditory metho Writing style on the blackboard Dialogue style Direct	Hypothesis testing	C1 Proficient in hypoth testing Dent, least significa (difference, Duncan .	2 Theoretical	4

Solve examples with homework	Assigning tasks And report	Completely randomized design	B6 gives examples of Completely randomized design and that Apply examples	Practi3 cal	
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Randomized block design Complete	B3 Proficient in sector design Complete randomization by definition of design Its advantages and disadvantages and the basis for its application An example application	2 Theore tical	5
Solve examples with homework	Assigning tasks And report	variance Estimating components	C7 Proficient in estimating variance components For a completely randomized design, specify The most important laws in an analysis table variance	3 practic al	
Short exams, assignments, discussions	Auditory methods Writing style	Relative efficiency To design completely blocks randomized	C2 shows the relative efficiency To design completely	2 Theoreti	6

Short practical test 1 with homework	on the blackboard Dialogue style Direct Assignment to M Maha And report	Comparison with a completely randomized design Estimating variance components	randomized blocks Comparison with a completely randomized design By clarifying the law relative efficiency of and estimating the missing value C7 Proficient in estimating variance components For a completely randomized design applied Questions on a completely randomized design Indirect		
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Latin square design	B4Mastered box design Latin Defining design and its features And its flaws The basis for its application and application as an example On tha	2 Theore tical	7

Solve tests on a completely randomized design	Assigning tasks And report	Estimating variance components	C7 Proficient in estimating variance components For a completely randomized design Conducting tests on the design randomness Complete	3 practical	
،Short exams assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Relative efficiency To design the Latin square compared to The rest of the designs	C3Shows relative efficiency To design the Latin square compared to The rest of the designs apply the law Concerning relative efficiency and estimating missing value	Theor2 etical	8
Solve examples with homework and a short practical test	Assigning tasks And report	Randomized block design Complete	C8Gives examples of Randomized block design Complete by applying examples that	Practi3 cal	

A 2nd semester exam with a final exam	Auditory metho Writing style on the blackboard Dialogue style Direct	Global experiments	B5 Proficient in facto experiments Definition and applicati of a global experiment Using a complet randomized design Defining experiments ar its advantages a disadvantages Apply an example factorial experiments	Theor2 etical	9
Solve examples with homework	Assigning tasks And report	Relative efficiency To design random sectors Compared with a completely randomized design	C9Determines relative efficiency To design random sectors Compared with a completely randomized design Apply an example and calculate Missing value	3 practic al	
test A short with assignments and assignments	Auditory methods Writing style on the blackboard Dialogue style Direct	Factorial experiments With three factors	D1Conducts factorial experiments factor equation -Three model Mathematical and analysis of variance table	Theor2 etical	10

Solve examples with homework and a short practical test	Assigning tasks And report	Latin square design	C10Select examples of Latin square design applying an example On design	3 practical	
Short exams, assignments, discussions	Auditory metho style on Writing the blackboard Dialogue style Direct	Factorial experiments i design Complete random sector	D2 concludes factori experiments In a randomized blc design Complete Mathematic model equation And an analysis of varia table	Theoreti l	11

Solve examples with homework solutions	Assigning tasks And report	Examples ofLSD	B7 gives examples of Direct latin square desig	practical	
Short exams, assignments discussions	Auditory metho Writing style on the blackboard Dialogue style Direct	General questions ab CRD (Full review)	C4Identifies questions c design Direct and indir complete randomizatior	Theoreti l	12
Solve examples with a short practical test	Assigning tasks And report	Examples ofLSD	B7Gives examples of design Latin indirect squ	practical	

Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	General questions on RCBD (Full review)	C5Sets questions on design Direct complete random sectors And indirect	Theoretical	13
Solve examples with a short test	Assigning tasks And report	Examples ofLSD	B7examples of Give design Latin square estimation Design effects	Practical	
3 exam With a final test	Auditory metho Writing style on the blackboard Dialogue style Direct	Questions about the Latin square LSD comprehensive) (review	C6 Marks questions the box Latin direct and indirect	Theoretical	14

Give examples with homework	Assigning tasks And report	method Missing value of estimating it in LSD design	C11Clarifying the value Lost and relative efficiency of the design Latin square and give questions on it	Practical	
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Questions about global experiments (Full review)	C6Application of questions on experiments Factorial using design Complete randomness	Theoretical	15
Short test	Assigning tasks And report	Global experiments	C12 sets out example experiments Globalism	practical	

11. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as .daily preparation, daily, oral, monthly, written exams, reports, etc

Relative % weight	Class	Calendar date (week)	Calendar methods	T
%13	7 theoretica + l 6 practical	My theory for a (week (15 My work week (15)	theoretical final report + a final A report on the subject the operation	1
%6	4 Theoretic + al Practica2 l	(week (3	(Short test (1Quiz	2
%15	10 theoretica +l	(week (9	Midterm test (theoretical and (practical	3

	5 practical			
%6	Theoreti4 + cal Practica2 l	(week (12	(Short test (2Quiz	4
%20	20	Practical exams week	Final practical test	5
%40	40	The week of theoretical exams	Final theoretical test	6
%100	100		the total	

12. teaching resources Learning and	
Design and analysis of experimer book	(Required textbooks (methodology, if any
	(Main references (sources
Lectures and books published universities Iraqi	Recommended supporting books and (….references (scientific journals, reports
Websites specialized in designing a analyzing experiments	Electronic references, Internet sites

Instructor of theoritical part

Raghad naseer walid

Instructor of practical part
Nahid sharif omar

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سمية خلف بدوي
رئيس قسم علوم الأغذية

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