# Course description form

## 1. Course Name

### Statistical

2. Code Course

## **STAT109**

3. year /Semester

2024-The second (spring) semester, first stage, 2023

4. description was prepared Date this

# 2024/2/1

5. Available attendance forms .A

Presence

6. (al)/number of units (totalNumber of study hours (tot theoretical + 3 practical / 3.5 units 2

## 7. (if more than one name is mentioned) Name of the course administrator

M. Raghad Naseer Walid

M. M. Nahid Sharif Omar

## 8. objectives Course

#### :Practical

Enabling the student to identify the most important data that controls
In the method of collecting them, tabulating them, and placing them in a frequency tribution tabledis
In addition to the most important statistical laws in calculating results
To know its significance or not, based on the .null and alternative theory

#### Objectives of the study subject

:theoretical

nabling the student to understand and E related to statistics comprehend what is

Mathematical relations and their relationship to

.scientific experiments

Enable the student to know the nature of data, its components and features

- .ataln the method of collecting d
- the student to become familiar Enabling
   with methods of collecting and classifying data
   And put it in a frequency distribution table
- Empowering the student with his ability to know the most important mathematical standards in calculating data

dent can judge the significance of the results The stu according to the statistical hypotheses

Teaching and Learning Strategies		
:Practical Adaptation through teamwork to reveal .leadership skills Adapt tasks and reports to learn about r mental skillsthei	:My theory Interactive lecture – tormingBrains – Dialogue and discussion – Adapt tasks and reports – - a scientific visit to Conducting private research centers With statistical data	The strategy
	With statistical data	Siving a

# 10. Course structure

Evaluation	Learning	Name of the unit	Required learning	hours	the
method	method	or topic	outcomes		week
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Introduction to statistics	A1 The student is given an introductionto Statistics by definition tatisticsof s Variables, sections, and history of science Statistics	2 Theore tical	1
Short practical 1 test	Assigning tasks And report	The nature of statistical data and symbols Statistics	A8 recognizes the data csStatisti	Practi3 cal	
Short exams, assignments, discussions	:My theory Auditory methods Style of writing on the blackboard Dialogue style Direct	:My theory The nature of statistical tada	B1 explains the nature of the data Statistics in identifying data Population, sample, cal symbolsand statisti	Theore tical	2

Solve				<u> </u>	
examples and homework	Assigning tasks And report	The nature of statistical data and symbols Statistics	A8 recognizes the most important Statistical symbols And give examples	Practi3 cal	Will and the second
assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Tabular presentation and graphical representation	A2 recognizes the display Aljadduli And graphical representation by recognition Types of tables and definitions some the mission And a frequency distribution table	2 Theore tical	3
Apply examples of statistical symbols and homework	Assigning tasks And report	The nature of statistical data and symbols Statistics	A8 knows the most important rules The mission is on Statistical symbols And application to it	Practi3	
Short exams, assignments, discussions	tory Audi methods Writing style on the blackboard Dialogue style Direct	Frequency distribution table Relative	B2 mastered the distribution table Iterative Relative as shown in the table And the graphical representation of the distribution table Relative frequency and frequency table .The gathering	2 Theore tical	4

Short practical 1 test	Assigning tasks And report	Graphical tion and representa tabular display	C2 is familiar with graphing tabular display consists of a frequency distribution table and its representation	Practi3 cal	Des des des
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Measures of concentration or mediation	B3 is proficient in positioning measures Mediation by defining standards and recognition On the most important standards and application of the mean Arithmetic, median, and mode for classified and unclassified values	2 Theore tical	5
Solve examples and homework	Assigning tasks And report	Measures of concentration or mediation	B7 liar with is fami positioning standards Mediation by applying examples of mediation Arithmetic calculation of classified and unclassified values .	Practi3	
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct		B4 Proficient in dispersion metrics Difference in definition of standards and recognition On the most important metrics and estimation of variance The standard deviation and deviation Average ssified and Cla .unclassified values	2 eoreTh tical	6

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Solve					1		1
examples and homework	Assigning tasks And report	Measures concentration mediation	of	B7 is familiar with positioning standards Mediation by applying tionexamples of media Classified and unclassified values	Practi3	The Sold of the So	1 de la serie
Semester exam  final exam  report	Auditory methods Writing style on the blackboard Dialogue style Direct	Principles probability theory	of	C1 Explains theoretical principles Probabilities by defining probabilities The most important terms used And discrete probability distributions and properties Binomial distribution	2 Theore tical	7	
Solve examples and homework	Assigning tasks And report	Measures concentration mediation	of	B7 is familiar with positioning standards Mediation by applying examples along the lines Classified and unclassified values	3 practic al		
Short exams, assignments, cussionsdis	Auditory methods Writing style on the blackboard Dialogue style Direct	Hypothesis testing		B5 Proficient Test Hypotheses by identifying the most important Statistical hypotheses and decision making	Theor2 etical	8	

C1 1	1		T			
Short practical test 2	Assigning tasks And report	Measures of dispersion or difference	B8 is familiar with dispersion metrics Difference by applying examples to the term Variance, mean and standard deviation	Practi3 cal	ab/isola Jivi	
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style ctDire	square -Chi distribution	A3 recognizes the square distribution Chi by definition of chi square and steps Test and apply an example distribution Chi square	Theor2 caleti	9	
Solve examples with homework	Assigning tasks And report	Principles of probability theory	C1 Proficient in theoretical principles Possibilities by taking applications on Possibilities	3 practic al		
Short exams, assignments, discussions	Auditory methods Writing style on the blackboard Dialogue style Direct	Statistical tests	A4Familiar with statistical tests By learning about the most important steps Statistics for tests	Theor2 etical	10	
Solve examples with homework	Assigning tasks And report	Hypothesis testing	C3 illustrates hypothesis testing Estimating hypotheses after solving an example On that	3 practic al		

Short exams,					
assignments,	Auditory methods	Normal distribution	A5 recognizes the normal distribution	Theor2 etical	11
discussions	Writing style		Defining normal		
	on		distribution and		
	the blackboard		methods for		
	Dialogue style		estimating it		
	rectDi				
			Signature of the state of the s	1000/200 100 100 100 100 100 100 100 100 100	
Short practical					45
test 3	:practical	Statistical tests	C4 suggests methods	9	
test 5	Assigning tasks		The most important	3 practic	
	And report		statistical tests	al	
			square test -Chi		
Short exams,					
assignments	Auditory	Examples of normal	B6 Try examples of	Theor2	12
and	methods	distribution	distribution	etical	
discussions	Writing style		y applying Natural b		
	on		an example to the		
Solve	the blackboard		distribution		
examples and	Dialogue style		Natural		
homework	ectDir				
	:practical				
		Test z ical tests		Practi3	
	Assigning tasks			cal	
	And report		C4 suggests methods		
			The most important		
			statistical tests		
			) distributiont (		

exams, Short					
assignments, discussions	ory Audit methods Writing style on the blackboard Dialogue style		A6 knows thez test By definition The test and its estimation methods	Theor2 etical	13
	Direct			Joseph Contraction of the Contra	1. Bob. S.
practical Short test 4	Assigning tasks portAnd re	Statistical tests	C4 suggests methods The most important statistical tests ) testz (	3 practic al	
exam, final 2 report · exam	Auditory methods Writing style on the blackboard Dialogue style Direct	t distribution	A7 knows thet distribution by definition The test and its estimation methods	Theor2 etical	14
Solve examples and homework	Assigning tasks And report	Statistical tests	B10 masters normal distribution Studying applications on normal distribution	Practi3	

Short exams,							
assignments,	Auditory	Correlation	and	A7 is fam	iliar with	Theor2	15
assignification,	methods	regression		ation	and correl	etical	
discussions	Writing style			regression			
	on			Definition	of		
	the blackboard			correlation	and		
	Dialogue style			regression r	nethods		
	Direct			Appreciate	it		
						55 Logo 13	206 - 20 CO
Short practical			•			3	
test 4	Assigning tasks	Correlation	and		correlation	practic	-
	And report	regression		and regressi		al	
					examples		
				of correlation			
				And decline	e		

# Course evaluation .11

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

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Instructor of theoritical part

Instructor of practical part

Nahid sharif omar

Raghad nasseer

Chairman of the scientific committee

Head of the department of Food science

Prof. Dr. Moafak mahmood ahmed

Prof. Dr. Sumiya kalaf badawi