## **MODULE DESCRIPTION FORM**

Module Information						
Module Title	AGRICULTURAL STATISTICS			Module Delivery		
Module Type		Core learning activit	у	⊠ Theory		
Module Code	AGS106	50		☐ Lecture ☐ Lab ☑ Tutorial ☐ Practical		
ECTS Credits	5					
SWL (hr/sem)	125				☐ Seminar	
Module Level		1	Semester	of De	livery	2
Administering Department		SSWR1969, PLPR1966, HOLA1974, FORE1964, FOSC1965, FICR1973, ANPR1964, AGEC1979, AETT1979, AGME1986	College	AGF	AGFO1964	
Module Leader  Moyassa Nofal Iss Taha Mo Firas Ka Khaled A Talal Sad		thiy abd eyaa Mohammed Iohammed Adil r Mohammed Aziz a Mohamed bhammed Taki dhim Dawoo Aljuboori Anwer Khaled ALKHALED eed Hameed Husain Ai Al-Hadedy	e-mail	dr.or asma moy: nofe taha: firasa khali stala	zu-kh1985@uomosul.edu.iq dr.omaralmallah@uomosul.edu.iq asmaama@uomosul.edu.iq moyassar_aziz@uomosul.edu.iq nofelemh@uomosul.edu.iq tahataqi@uomosul.edu.iq firasaljuboori@uomosul.edu.iq skhalid.anwar31@uomosul.edu.iq stalal1982@uomosul.edu.iq sumod husain@uomosul.edu.iq	
Module Leader's Acad. Title		Professor  Assistant Professor	Module L	.eader's Qualification Ph.D.  MSc.		
Module Tutor N.A.			e-mail	N.A.		
Peer Reviewer Name		N.A.	e-mail	nail N.A.		
Scientific Committee Approval Date		15/10/2024	Version Number			

Relation with other Modules				
Prerequisite module	None	Semester		
Co-requisites module	None	Semester		

Module Aims, Learning Outcomes and Indicative Contents					
	1- Knows statistics and its types, and differentiates between descriptive				
	statistics and inferential or inferential statistics				
	2- Explains what descriptive variables are, and recognizes the difference				
	between a sample and a population				
	3- Organizes and draws a frequency distribution table and identifies its parts				
Module Objectives	4- Organizes a relative frequency distribution table and ascending and				
	descending summation				
	5-Finds the arithmetic mean - and recognizes the properties of the arithmetic				
	mean				
	6- Works on how to find the range, mean deviation, variance, and standard				
	deviation				
	LO#1: Is able to compile and classify data, and present it with tables and graphics				
	LO#2: Is able to calculate descriptive statistics of numerical data.				
Module Learning Outcomes	LO#3: Can build hypothesis and test the hypothesis, and can make a statistical deduction.				
Outcomes	LO#4: Can build relation between the data using statistics and make interpretations on them in order to make decisions.				
Indicative Contents	Enriching the student with knowledge regarding the conduct and benefit of the agricultural statistical process, and learning how to measure the measurement of centering, mediation and correlation and how to employ them in the field of agricultural engineering sciences and techniques for implementing integration				
	correctly to reach quantity and quality				
	Total hrs = 125 = SSWL - (Exam hrs) = 125-3= 122 (Time table hrs x 15 weeks)				

Learning and Teaching Strategies				
Strategies	<ol> <li>Interactive lecture, Brainstorming</li> <li>Dialogue and discussion</li> <li>Assigning reports</li> <li>Quizzes</li> <li>Show examples for writing scientific reports in the correct formats.</li> </ol>			

Student Workload (SWL)				
Structured SWL (h/sem)  78 Structured SWL (h/w)				
Unstructured SWL (h/sem)	47	Unstructured SWL (h/w)	3	
Total SWL (h/sem)	125			

Module Evaluation					
		Time/ Number	Weight (Marks)	Week Due	Relevant Learning Outcome
	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
Formative assessment	Collage Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Home Assignments	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
assessment	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

## Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction to the nature of statistics and the most important sections of statistics - the nature of data and statistical symbols
Week 2	The nature of statistical data - the difference between quantitative and descriptive variables, with examples of each type
Week 3	The difference between society and sample with mathematical examples
Week 4	Tabular and Graphing - Frequency Distribution Table - How to Create Classes and Find Class Length
Week 5	Clustered Distributions - Descending Cumulative Frequency Distribution Table - Frequency Curve - Graph of Cumulative Frequency Distribution Table
Week 6	Measures of mediation and centering - arithmetic mean - geometric mean
Week 7	Measures of centering and centering - harmonic mean - squared mean - median - mode
Week 8	Measures of dispersion or variation - range - mean deviation - variance and standard deviation
Week 9	Measures of dispersion or variation - the most important properties of variation or standard deviation - standard error - standard score
Week 10	Principles of probability theory - factorial - permutations - combinations - random experiment
Week 11	Discrete Probability Distributions - Binomial Distribution - Properties of Binomial Distribution
Week 12	Hypothesis Testing - Statistical Hypothesis - Null Hypothesis - Alternative Hypothesis
Week 13	Types of Error - General Steps in Hypothesis Testing
Week 14	T-test - Z-test
Week 15	Simple Correlation and Regression - Correlation Coefficient
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Syllabus)			
	Material Covered		
Week 1	The natural of statistical data		
Week 2	The natural of statistical data		
Week 3	Statistical symbol		
Week 4	Graphical represent and display of data		
Week 5	Graphical represent and display of data		
Week 6	Measures of mediation and centering		
Week 7	Measures of mediation and centering		
Week 8	Measure of dispersion or different		
Week 9	Measure of dispersion or different		
Week 10	Midterm exam		
Week 11	Probability theory		
Week 12	Statistical test		
Week 13	Statistical test		
Week 14	Correlation coefficient data analysis		
Week 15	Preparatory week before the final Exam		

Learning and Teaching Resources					
	Text	Available in the Library?			
Required Texts	المدخل الى علم الإحصاء - مبادى علم الإحصاء	Yes			
Recommended Texts	كتاب علم الإحصاء وأساليب علم الاحصاء	No			
Websites	https://www.udemy.com/course/bmwqjwxb/?srsltid=AfmBOooesbV6jEmBd_tAQSa288D_ _QY0Hc1yK1i3seCLaNtYAT4ckpyn				

Grading Scheme							
Group	Group Grade Marks % Definition						
	A - Excellent	90 - 100	Outstanding Performance				
Success Group	<b>B</b> - Very Good	80 - 89	Above average with some errors				
(50 - 100)	<b>C</b> - Good	70 - 79	Sound work with notable errors				
(65 250)	<b>D</b> - Satisfactory	60 - 69	Fair but with major shortcomings				
	E - Sufficient	50 - 59	Work meets minimum criteria				
Fail Group	<b>FX</b> – Fail	(45-49)	More work required but credit awarded				
(0 – 49)	<b>F</b> – Fail	(0-44)	Considerable amount of work required				

**Note:** Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.



