MODULE DESCRIPTION FORM

Module Information

Module Title	AGRICULTURAL STATISTICS	**Module Delivery**	
Module Type	Core learning activity	☒ Theory ☐ Lecture ☐ Lab ☒ Tutorial ☐ Practical ☐ Seminar	
Module Code	AGS1060		
ECTS Credits	5		
SWL (hr/sem)	125		

Module Level	1	**Semester of Delivery**	2
Administering Department	SSWR1969, PLPR1966, HOLA1974, FORE1964, FOSC1965, FICR1973, ANPR1964, AGEC1979, AETT1979, AGME1986	**College**	AGFO1964

Module Leader	zwaid fathiy abd Omar Dheyaa Mohammed Asmaa Mohammed Adil Moyassar Mohammed Aziz Nofal Issa Mohamed Taha Mohammed Taki Firas Kadhim Dawoo Aljuboori Khaled Anwer Khaled ALKHALED Talal Saeed Hameed Sumood Husain Ai Al-Hadedy	**e-mail**	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 khalid.anwar31@uomosul.edu.iq stalal1982@uomosul.edu.iq sumod_husain@uomosul.edu.iq
Module Leader's Acad. Title	Professor Assistant Professor	**Module Leader's Qualification**	Ph.D. MSc.
Module Tutor	Ahmed Hashim Ali	**e-mail**	Ahmadhashim1982@uomosul.edu.iq
Peer Reviewer Name	salah fahmy shabaa	**e-mail**	salahodesh@uomosul.edu.iq
Scientific Committee Approval Date	15/10/2024	**Version Number**	1.0

Relation with other Modules

Prerequisite module	None	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	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 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
Module Learning Outcomes	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. LO#3: Can build hypothesis and test the hypothesis, and can make a statistical deduction. 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	1. Interactive lecture, Brainstorming 2. Dialogue and discussion 3. Assigning reports 4. Quizzes 5. Show examples for writing scientific reports in the correct formats.

Student Workload (SWL)			
Structured SWL (h/sem)	78	**Structured SWL (h/w)**	5

Unstructured SWL (h/sem)	47	Unstructured SWL (h/w)	3
Total SWL (h/sem)	125		

<table>
<tr><td colspan="7" align="center">Module Evaluation</td></tr>
<tr><td></td><td></td><td>Time/ Number</td><td>Weight (Marks)</td><td>Week Due</td><td colspan="2">Relevant Learning Outcome</td></tr>
<tr><td rowspan="4">Formative assessment</td><td>Quizzes</td><td>2</td><td>10% (10)</td><td>5 and 10</td><td colspan="2">LO#2</td></tr>
<tr><td>Collage Assignments</td><td>2</td><td>10% (10)</td><td>2 and 12</td><td colspan="2">LO#1, LO#2 and LO#3</td></tr>
<tr><td>Home Assignments</td><td>1</td><td>10% (10)</td><td>Continuous</td><td colspan="2">All</td></tr>
<tr><td>Report</td><td>1</td><td>10% (10)</td><td>13</td><td colspan="2">LO#3</td></tr>
<tr><td rowspan="2">Summative assessment</td><td>Midterm Exam</td><td>2hr</td><td>10% (10)</td><td>7</td><td colspan="2">LO#2</td></tr>
<tr><td>Final Exam</td><td>3hr</td><td>50% (50)</td><td>16</td><td colspan="2">All</td></tr>
<tr><td colspan="2">Total assessment</td><td></td><td>100% (100 Marks)</td><td></td><td colspan="2"></td></tr>
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	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	Introduction to Statistics - Principles of Statistics	Yes
Recommended Texts	Statistics and Statistical Methods Book	No
Websites	https://www.udemy.com/course/bmwqjwxb/?srsltid=AfmBOooesbV6jEmBd_tAQSa288D_ _QY0Hc1yK1i3seCLaNtYAT4ckpyn	

Grading Scheme				
Group	**Grade**	Assessment	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	Excellent	90 - 100	Outstanding Performance
	B - Very Good	Very Good	80 - 89	Above average with some errors
	C - Good	Good	70 - 79	Sound work with notable errors
	D - Satisfactory	Average	60 - 69	Fair but with major shortcomings
	E - Sufficient	Accepted	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	Failed (in process)	(45-49)	More work required but credit awarded
	F – Fail	Failed	(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.

جامعة الموصل
كلية الزراعة والغابات

قسم وقاية النبات

أ.د هيثم عبد السؤ محمد
رئيس اللجنة العلمية

الدكتور
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