

## MODULE DESCRIPTION FORM

| Module Information  |                  |  |   |           |   |   |   |
|---|------------------|--|---|-----------|---|---|---|
| Module Title AGRICULTURAL STATISTICS  |                  |  |   | Module    | Delivery  |   |   |
| Module Type   |                  | С  | ore learning activity   |           | ☑ Theory  |   |   |
| Module Code   |                  |  | AGS1060   |           |   | □ Lecture<br>□ Lab                              |   |
| ECTS Credits  |                  |  | 5   |           |   |   |   |
| SWL (hr/sem)  |                  |  | 125   |           |   | <ul><li>□ Practical</li><li>□ Seminar</li></ul> |   |
| Module Level  |                  | 1  |   | Semester  | of Delive   | ry  | 2   |
| Administering Department  |                  | SSWR1969, PLPR1966, HOLA1974, FORE1964, FOSC1965, FICR1973, ANPR1964, AGEC1979, AETT1979, AGME1986 |   | College   | AGFO1964  |   |   |
| Module Leader  Module Leader  Module Leader  Module Leader  Module Leader  Mofal Issa Mana Moha Firas Kadh Khaled And Talal Saeed |                  | eyaa l<br>loham<br>r Mol<br><mark>a Mo</mark><br>bham<br>dhim<br>Anwei<br>eed H                    | Mohammed<br>amed Adil<br>hammed Aziz<br>hamed<br>med Taki<br>Dawoo Aljuboori<br>r Khaled ALKHALED | 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 |   | edu.iq edu.iq osul.edu.iq edu.iq du.iq osul.edu.iq du.iq osul.edu.iq mosul.edu.iq |
| Module Leader's Acad. Title   |                  | ad. Title  Assistant Professor   |   | Module L  | eader's Q   | ualification                                    | Ph.D.<br><mark>MSc</mark> .   |
| Module Tutor  | Ahmed Hashim Ali |  | im Ali  | e-mail    | Ahmadhashim1982@uomosul.edu.ic  |   | uomosul.edu.iq  |
| Peer Reviewer Name  |                  | salah fahmy shabaa   |   | e-mail    | salahodesh@uomosul.edu.iq   |   | l.edu.iq  |
| Scientific Committee Approval Date  |                  | 15/10/2024   |   | Version N | lumber  | 1.0   |   |

| Relation with other Modules |   |               |  |  |  |  |  |
|-----------------------------|---|---------------|--|--|--|--|--|
| Prerequisite module         | None Semester   |               |  |  |  |  |  |
| Co-requisites module        | None  | None Semester |  |  |  |  |  |
| Modu                        | 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<br>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                       | <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) 5 |     |                        |   |  |  |
| Unstructured SWL (h/sem)                         | 47  | Unstructured SWL (h/w) | 3 |  |  |
| Total SWL (h/sem)                                | 125 |                        |   |  |  |

| Module Evaluation                 |                     |        |                |            |                     |  |
|-----------------------------------|---------------------|--------|----------------|------------|---------------------|--|
|                                   |                     | Time/  | Weight (Marks) | Week Due   | Relevant Learning   |  |
|                                   |                     | Number | weight (warks) | week Due   | Outcome             |  |
|                                   | Quizzes             | 2      | 10% (10)       | 5 and 10   | LO#2                |  |
| Formative                         | Collage Assignments | 2      | 10% (10)       | 2 and 12   | LO#1, LO#2 and LO#3 |  |
| assessment                        | Home Assignments    | 1      | 10% (10)       | Continuous | All                 |  |
|                                   | Report              | 1      | 10% (10)       | 13         | LO#3                |  |
| Summative                         | Midterm Exam        | 2hr    | 10% (10)       | 7          | LO#2                |  |
| 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 |  |  |  |  |

| The nature of statistical data - the difference between quantitative and descriptive variables, with examples of each type                        |
|---|
| The difference between society and sample with mathematical examples  |
| Tabular and Graphing - Frequency Distribution Table - How to Create Classes and Find Class Length   |
| Clustered Distributions - Descending Cumulative Frequency Distribution Table - Frequency Curve - Graph of Cumulative Frequency Distribution Table |
| Measures of mediation and centering - arithmetic mean - geometric mean  |
| Measures of centering and centering - harmonic mean - squared mean - median - mode  |
| Measures of dispersion or variation - range - mean deviation - variance and standard deviation  |
| Measures of dispersion or variation - the most important properties of variation or standard deviation - standard error - standard score          |
| Principles of probability theory - factorial - permutations - combinations - random experiment  |
| Discrete Probability Distributions - Binomial Distribution - Properties of Binomial Distribution  |
| Hypothesis Testing - Statistical Hypothesis - Null Hypothesis - Alternative Hypothesis  |
| Types of Error - General Steps in Hypothesis Testing  |
| T-test - Z-test   |
| Simple Correlation and Regression - Correlation Coefficient   |
| 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 |  |  |  |

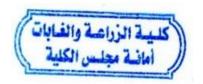
| Week 6  | Measures of mediation and centering    |
|---------|--|
| Week 7  | Measures of mediation and centering    |
| Week 8  | Measure of dispersion or different     |
| Week 9  | Measure of dispersion or different     |
| Week 10 | Midterm exam                           |
| Week 11 | Probability 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<br>Texts            | Statistics and Statistical Methods Book   | No                        |  |  |  |
| Websites                        | https://www.udemy.com/course/bmwqjwxb/?srsltid=AfmBOooesbV6jEmBd_tAQSa288D_<br>_QY0Hc1yK1i3seCLaNtYAT4ckpyn |                           |  |  |  |

|               | Grading Scheme          |            |          |                                  |  |  |  |
|---------------|-------------------------|------------|----------|----------------------------------|--|--|--|
| Group         | Grade                   | Assessment | Marks %  | Definition                       |  |  |  |
|               | A - Excellent           | Excellent  | 90 - 100 | Outstanding Performance          |  |  |  |
| Success Group | <b>B</b> - Very Good    | Very Good  | 80 - 89  | Above average with some errors   |  |  |  |
| (50 - 100)    | <b>C</b> - Good         | Good       | 70 - 79  | Sound work with notable errors   |  |  |  |
|               | <b>D</b> - Satisfactory | Average    | 60 - 69  | Fair but with major shortcomings |  |  |  |

|            | E - Sufficient   | Accepted            | 50 - 59 | Work meets minimum criteria           |
|------------|------------------|---------------------|---------|---------------------------------------|
| Fail Group | <b>FX</b> – Fail | Failed (in process) | (45-49) | More work required but credit awarded |
| (0 – 49)   | <b>F</b> – 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.





Chairman Scientific Committee:

prof.Dr. Kais Nazem Ghazal

The Signature:

Head of the Department

Or Zuwaid Fathi Abd

The Signature