



PORTFOLIO

Department of Agribusiness

Faculty of Agriculture

University of Islam Malang

Subject	Statistics
Module Level, if available	Undergraduate Study Program of Agribusiness
Subject Code	MKW60710
Type of course	Compulsory course
Credits	3 credits/ 5.1 ECTS
Semester	3
Prerequisite	-
Parallel Class	A,B,C, and D
Module Description	This course explains the basic principles of statistical methods some analytical methods that can be applied to various applied fields, such as Agriculture particularly in the field of Agribusiness. These courses also became the basis for higher teaching subjects, such as Econometrics Courses. The topics covered in this course are statistical description, hypothesis presumption and testing, hypothesis presumption and testing regarding middlegrades, correlations, Simple linear regression, multiple linear regression as well as the application of non-parametric statistics. The explanation of the topics in this course is given the explanation through the use of Statistics Software
Learning Outcomes	<p>Exploring statistical theoretical concepts in agribusiness or agricultural socio-economic systems (CLO 1)</p> <p>Exploring statistical applications in agribusiness or agricultural socio-economic systems (CLO 2)</p> <p>Able to analyze the phenomenon of problems in the field of agribusiness and socio-economic agriculture (CLO 3)</p> <p>Able to test parameters with statistical methods, both inscript and inference (CLO 4)</p> <p>Able to interpret the results of analysis and parameter testing (CLO 5)</p> <p>Able to draw conclusions and provide policy recommendations on the phenomenon of agricultural problems in the socio-economic field of agriculture. (CLO 6)</p>
Learning Content	<p>After completing this subject students are able to:</p> <ol style="list-style-type: none"> 1.Students can explain the scope of statistics in general, identifying the realm of descriptive statistics and inferentialstatistics. Understand the type of measurement scale 2.Students will be able to explain the population, and examples and concepts of sample withdrawal. 3.Students can explain the principles of parameter restoration, guess the average and variety of the population, and create a confidence interval for population parameters, as well as determine the size of the example for the restoration of the average population with a certain level of accuracy. 4.Students can explain the principles of the hypothesis test, perform a hypothesis test on averages, and the proportion of the population, the principles of the restoration of the similarity of two varieties, the difference in the average of two populations, and the difference of two proportions, the principle of correlation, simple linear regression principles, and perform simple linear regression parameters, and test their regression parameters. 5.Students can explain the principles of multiple linear

	<p>regression, perform multiple linear regression parameters, and test their regression parameters.</p> <p>6. Students can explain the principles in non-parametric statistics.</p>
Aims	Students able to apply the learning results of statistics course independently in agriculture/agribusiness and or other fields.
Teaching Methods	Some of the methods applied in this course consist of lectures, assignments, problem based learning, practice and group presentations. All these methods are applied to 4 parallel classes
Participant	<ul style="list-style-type: none"> • A class: 27 students from 3th semester • B class: 32 students from 3th semester • C class: 29 students from 3th semester • D class: 31 students from 3th semester
Teaching Attendance	<p>A total of 14 meetings were held totally (100%) by lecturers (class A, B,C,D)</p> <p>In class A, 2 students out of 27 have an attendance rate of less than 100%.</p> <p>In B class, 0 students out of 32 students have an attendance rate of less than 100%</p> <p>In C class, 4 students out of 29 students have an attendance rate of less than 100%</p> <p>In D class, 4 students out of 31 students have an attendance rate of less than 100%</p>
Evaluation System	The assessment components in this course consist of attendance, structured assignments, practicum, midterm exams and final exams. All these components are then combined to get the final score. Assessment matrix and sample questions are available in Appendix 1 and Appendix 2
Learning Result	<ul style="list-style-type: none"> • Achievement ILO in A Class <ul style="list-style-type: none"> CLO 1 = 77.00 (Excellent) CLO 2 = 80.00 (Excellent) CLO 3 = 77.00 (Excellent) CLO 4 = 82.00 (Excellent) CLO 5 = 83.00 (Excellent) CLO 6 = 77.00 (Excellent) • Achievement ILO in B Class <ul style="list-style-type: none"> CLO 1 = 72.00 (Excellent) CLO 2 = 78.00 (Excellent) CLO 3 = 75.00 (Excellent) CLO 4 = 79.00 (Excellent) CLO 5 = 77.00 (Excellent) CLO 6 = 75.00 (Excellent) • Achievement ILO in C Class <ul style="list-style-type: none"> CLO 1 = 74.00 (Excellent) CLO 2 = 79.00 (Excellent) CLO 3 = 80.00 (Excellent) CLO 4 = 80.00 (Excellent) CLO 5 = 79.00 (Excellent) CLO 6 = 77.00 (Excellent)

	<ul style="list-style-type: none"> • Achievement ILO in D Class CLO 1 = 77.00 (Excellent) CLO 2 = 78.00 (Excellent) CLO 3 = 79.00 (Excellent) CLO 4 = 82.00 (Excellent) CLO 5 = 80.00 (Excellent) CLO 6 = 80.00 (Excellent) <p>Complete achievement on average ILO can be seen on Appendix 3</p>
Statistical Distribution	<ul style="list-style-type: none"> • A Class, Grade distribution: A = 12 students, B = 13 students, E = 2 students • B Class, Grade distribution: A = 9 student, B = 20 students, C = 1 students, D = 2 students • C Class, Grade distribution: A = 14 student, B = 11 students, E = 4 students • D Class, Grade distribution: A = 14 student, B = 11 students, E = 4 students <p>Complete achievements on each CLO per student can be seen in Appendix 4</p>
Teaching Observation	<p>Materials were delivered in Indonesia. The student could understand the materials well.</p> <p>In A Class: there were 2 students poor on both CLO 1, 1 student poor on both CLO 2, 2 students poor on CLO 3, 1 student poor on CLO 4, and 2 student poor on CLO 5, 2 student poor on CLO 6</p> <p>In B Class: there were 3 students poor on both CLO 1, 3 student poor on both CLO 2, 3 students poor on CLO 3, 2 student poor on CLO 4, and 3 student poor on CLO 5, 3 student poor on CLO 6</p> <p>In C Class: there were 3 students poor on both CLO 1, 3 student poor on both CLO 2, 2 students poor on CLO 3, 3 student poor on CLO 4, and 2 student poor on CLO 5, 3 student poor on CLO 6</p> <p>In D Class: there were 4 students poor on both CLO 1, 4 student poor on both CLO 2, 4 students poor on CLO 3, 4 student poor on CLO 4, and 4 student poor on CLO 5, 4 student poor on CLO 6</p>
Learning Constraints	<p>A, B, C and D Class: Lack of practice in the field makes it difficult for students to understand the function of Statistics</p>
Recommendation	<p>A Class: Paying more attention for students who hardly understand the materials.</p> <p>B Class: Paying more attention for students who hardly understand the materials.</p> <p>C Class: Paying more attention for students who hardly understand the materials.</p> <p>D Class: Paying more attention for students who hardly understand the materials.</p>

Appendix 1. Scoring Matrix

Nomenclature	Weight	Final Score	
		Letter Mark	Score average
Assignment	20%	A	80 – 100
Midle semester test	20%	B	70 - <80
Final semester test	20%	C	55 - <70
Practice	30%	D	50 - < 55
Presence	10%	E	0 - <50

Appendix 2. Question samples

A.

1. The statistical test scores of 65 students are as follows: 30, 25, 90, 42, 50, 45, 26, 80, 70, 70, 60, 45, 46, 50, 40, 78, 55, 43, 56, 58, 42, 52, 53, 68, 50, 40, 78, 36, 42, 35, 60, 85, 30, 68, 82, 27, 25, 75, 76, 74, 71, 72, 63, 63, 62, 65, 61, 50, 50, 51, 56, 58, 57, 64, 60, 65, 74, 70, 72, 90, 88, 88, 90, 75, 75.
Work according to the order to do the weekly assignments that you have work on the topic of frequency distribution.

B

1. Explain the meaning of Statistics. And why is it important to study Statistics.
2. Mention the scale of data measurement in Statistics, Explain what the differences and similarities are to the four measurements, give examples.
3. Explain the meaning of the Sampling Framework. Also explain what is meant by *REPRESENTATIVE* when the sample is used as an object to record data from the population.
4. What types of sampling are included in random samples and non-random samples.
5. What is the difference between simple random sampling and systematic sampling, explain
6. Why if heterogeneous data sampling should be a stratified random sample, explain
7. If you are researching the topic of agricultural product marketing, what method of sampling would you use, explain. And if you research without knowing the population then the determination of the sample includes a random sample or a non-random sample, why is that?
8. If your research topic is about the behavior of women wearing headscarves, then who is your sample and determined by what method, please explain.

Standard

Std num-based AI		Weighted avg LO based AI	
$70 \leq AI$	HIGH	$70 \leq AI$	EXCELLENT
$60 \leq AI < 70$	MEDIUM	$60 \leq AI < 70$	SATISFACTORY
$50 \leq AI < 60$	LOW	$50 \leq AI < 60$	DEVELOPING
$AI < 50$	VERY LOW	$AI < 50$	UNSATISFACTORY

