SEMESTER LEARNING PLAN

Courses	Statistics
Semester	III
Course Code	MKW60710
College Courses	
Preconditions	Mathematical Economics
Developer Lecturer	Dr. Ir. Bambang Siswadi, MP.
Master Lecturer	Dr. Ir. Bambang Siswadi, MP.
Authentication Date	
Study Program	Agribusiness
Faculty	Agriculture

ISLAMIC UNIVERSITY OF MALANG
2019

SEMESTER LEARNING PLAN

Courses/Semesters	Master Lecturer	Course Code	Credit Weight: 3 CREDITS
Statistics	Dr.Ir. Bambang Siswadi, MP	MKW60707	Theory: 60% Practice: 40%
Authorization/Authentication	Developer Lecturer	Head of Study Program	Vice Dean I
	Dr.Ir. Bambang Siswadi MP.	Dr. Dwi Susilowati, SP., MP.	Dr. Ir. Anis Sholihah, MP.

Learning Achievements	Graduate Learning Achievement (CPL) Study Program Charged in Courses
	ILO 2 Able to understand the rules and principles of agribusiness, social sciences, economics, and agricultural engineering as the basis of innovative agribusiness disciplines
	ILO 3 Able to understand the ethical concepts of agribusiness and quality protection in a multidisciplinary context for sustainable agribusiness
	ILO 5 Able to apply a variety of fundamentally oriented methods to solve certain practical problems related to agribusiness
	ILO 6 Able to evaluate projects according to techniques, methods, constraints, interpret data, and conclude it
	ILO 1 Able to answer problems related to entrepreneurship, agribusiness, and green food
	Learning Achievement Courses (CP-MK)
	CPMK 1 Exploring statistical theoretical concepts in agribusiness or agricultural socio-economic systems
	CPMK 2 Exploring statistical applications in agribusiness or agricultural socio-economic systems
	CPMK 3 Able to analyze the phenomenon of problems in the field of agribusiness and socio-economic agriculture

	CPMK 4 Able to test parameters with statistical methods, both inscript and inference.
	CPMK 5 Able to interpret the results of analysis and parameter testing,
	CPMK 6 Able to draw conclusions and provide policy recommendations on the phenomenon of agricultural problems in the socio-economic field of agriculture.
Course Output	The results of the evaluation of competency assessment of attitudes, knowledge, skills mastered by students with a minimum target of more than 50% of students get a good grade (B)
Expected Outcome	Students able to apply the learning results of statistics course independently in agriculture/agribusiness and or other fields.
Brief Description of Course	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
LearningMaterials:	1. INTRODUCTION 2. DECRYPTED AND DATA EXPLORATION 3. DECRYPTED AND DATA EXPLORATION (ADVANCED) 4. SAMPLE WITHDRAWAL THEORY 5. ESTIMATION/RESTORATION OF PARAMETERS 6. HYPOTHESIS TESTING 7. HYPOTHESIS TESTING (ADVANCED) 8. HYPOTHESIS TESTING (ADVANCED) 9. CORRELATION ANALYSIS 10. SIMPLE REGRESSION ANALYSIS 11. SIMPLE REGRESSION ANALYSIS (ADVANCED) 12. MULTIPLE REGRESSION ANALYSIS 13. MULTIPLE REGRESSION ANALYSIS (ADVANCED) 14. NON-PARAMETRIC STATISTICS

Book	Main:
	  1. Supramono and Sugiarto, 1993. STATISTICS. Publisher Andi Offset Yogyakarta
	  2. Walpole, R. E. 1992. Introduction to Statistics (translation). PT. Gramedia Pustaka Utama, Jakarta.
	  3. Koopmans, L. H. 1987. Introduction to Contemporary Statistical Methods 2nd ed. Duxbury Press, Boston
	
	Supporter:
	1. Youtube hints at the use of statistics apps

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
1	Sub CPMK-1 Students can explain the scope of statistics in general, identifying the realm of descriptive statistics and inferentialstatistics. Understand the type of measurement scale	1. Able to understand the definition of statistics, differences in descriptive statistics and inference. 2. Know the definition of a changer and various kinds of worshipers. 3. Able to distinguish the type of measurement scale (nominal, ordinal, interval, ratio)	Accuracy of explain the assessment indicator item	Form of learning: Self-Read Tasks Subject matter 1 Learning Methods: Answer questions and tasks Student learning experience: Do self-training tasks about statistics	Form of college learning Learning Methods: Q&A and *Small Group Discussion* Student Learning Experience 1. Hear-an explanation of the scope of statistics 2. Look at the differences in crypt statistics and inferences 3. Look at the difference in measurement scale	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes	INTRODUCTION: Scope of Statistics Book: Use 3 mandatory libraries	5
2-3	Sub CPMK-1 Students can explain the principles of statistical description, create descriptions of a wad of data, calculate location size and	1. Calculates frequency distribution, cumulative frequency	1. Accuracy of explanation and counting on assessment indicators 2. Accuracy in designing	Form oflearning: Chapter 2 Self-Reading Tasks Learning Methods:	Form of college learning Learning Methods: Q&A and *Small Group Discussion*	Study: 100 minutes Independent Work: 2x60 minutes	Descriptive and Data Exploration Book:	10

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
	diversity, and can explore data graphically.	2. Create a graphic presentation 3. Create a diagram 4. Calculate location size (average, average, median, and mode) 5. Calculates the measure of diversity (range, variety and standard deviation) 6. Calculate the percentile and quartile 7. Create a line box diagram	diaggrams or graphics	Answer questions and tasks **Student learning** experience: Doing self-training tasks about calculating frequency distribution, central value size and variation size	**Student learning experience:** 1. Listening and observing explanations about statistical crypts through statistical software applications 2. Interpret the results of the analysis correctly and correctly	PT: 2x 60 minutes	Use 3 mandatory libraries	
4	Sub CPMK-2 Students will be able to explain the population, and examples and concepts of sample withdrawal.	1. Understanding populations and examples (meaning examples, representative examples, and	1. Accuracy of explanation of population differences and examples 2. Accuracy of explanation of some example	**Form of learning:** Doing Self-Help Tasks **Learning Methods:** Answer questions and tasks	**Form of** college learning **Learning** Methods: Q&A and *Small Group Discussion*	Study: 100 minutes Independent Work: 2x60 minutes PT:	Sampel Withdrawal Theory Book:	5

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
		random examples) 2. Understand sample withdrawal and inference (understanding statistical inference, statistics and parameters, and distribution of samplewithdrawals). Probability Sampling (PS) and Non probability Sampling (NPS)	withdrawal methods 3. Accuracy of explanation and counting on assessment indicators	Student learning experience: Do self-training tasks about sample withdrawal	Student learning experience: 1. Look at population differences and examples. 2. Listen to the explanation of the mechanism of the method of withdrawal of examples both PS and NPS	2x 60 minutes	Use 3 mandatory libraries	
5	Sub CPMK-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	1. Understand the notion of presumption (unbiased presumption, and the best presumption) 2. Calculate the confidence interval for the normal	1. Accuracy of explanatory/estimated explanation 2. Accuracy of calculating point estimates and interval estimates	Form of learning: Practicum and self-task Learning Methods: Problem based learning And answer questions and tasks	Form of College learning Learning Methods: Problem-based learning Student learning experience:	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes	Estimation/ Parameter Forecasting Book: Use 3 mandatory libraries	5

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
	the average population with a certain level of accuracy.	distribution average, for the proportion	3. Accuracy of explanation and counting on assessment indicators	**Student learning experience:** 1. Perform self-help tasks on how to calculate estimated points or intervals	1. Listen to the explanation of the concept of estimation 2. Calculate trust lapses	Practicum: 2x170 minutes		
6	Sub CPMK-4 Students can explain the principles of the hypothesis test, perform a hypothesis test on averages, and the proportion of the population.	1. Know the principles of hypothesis testing (definition of hypothesis, type I error and type II error). 2. Perform hypothesis testing for population and proportions (z test and/or t test)	1. Accuracy of explanation of hypothesis testing concept 2. Accuracy of explanation and counting on assessment indicators	**Form of learning:** Practicum and Self-Task **Learning Methods:** Research-based learning **Student learning experience:** Analyze the data of observations in the field with statistical	**Form of** College learning **Learning** Methods: Research-based learning **Student learning experience:** 1. Test one-sided or two-sided hypotheses	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes Practicum: 2x170 minutes	Hypothesis Testing Book: Use 3 mandatory libraries	5

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
				software applications				
7	Sub CPMK-4 Students can explain the principles of the hypothesis test, perform a hypothesis test on averages, and the proportion of the population.	1. Perform hypothesis testing for population variety (square khi test) 2. Know the relationship of sample size and test effectiveness	1. Accuracy of explanation of hypothesis testing concept on population variety test 2. Accuracy of explanation and counting on assessment indicators	Form of learning: Practicum and Self-Task Learning Methods: Research-based learning Student learning experience: Analyze the data of observations in the field with statistical software applications	Form of College learning Learning Methods: Research-based learning Student learning experience: 1. Perform a one-sided or two-sided hypothesis test 2. Conduct a one-sided test of the average population	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes Practicum: 2x170 minutes	Hypothesis Testing Book: Use 3 mandatory libraries	10
8	Sub CPMK-4 Students can explain 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.	1. Calculate trust intervals and test hypotheses for two population averages (free and paired examples). 2. Perform tests for three middle	1. Accuracy of explanation of hypothesis testing concept on two population average tests 2. Accuracy of explanation of hypothesis	Form of learning: Practicum and Self-Task Learning Methods: Research-based learning	Form of College learning Learning Methods: Research-based learning Student learning experience:	PB: 100 minutes MILES: 2x60 minutes PT: 2x 60 minutes	Hypothesis Testing Book: Use 3 mandatory libraries	10

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
		values of the population (Anova)	testing concept on three population average tests 2. Accuracy of explanation and counting on assessment indicators	Student learning experience: Analyze the data of observations in the field with statistical software applications	1. Conduct a two-average population test 3. Conduct three tests of the average population	Research / Practicum: 2x170 minutes		
UTS								
9	Sub CPMK-4 Students can explain the principle of correlation.	1. Knowing the understanding and concept of correlation, 2. Know how tocalculate correlation	1. Accuracy of explanation of concepts and calculating correlation 2. Accuracy of correlation testing explanation	Form of learning: Practicum and Self-Task Learning Methods: Research-based learning Student learning experience: 1. Analyze the observation data in the field with statistical software applications 2. Interpret the results of the	Form of College learning Learning Methods: Research-based learning Student learning experience: 1. Conduct a correlation test 2. Interpret the results of the analysis	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes Practicum: 2x170 minutes	Correlation Analysis Book: Use 3 mandatory libraries	5

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
				analysis properly				
10-11	Sub CPMK-4 Students can explain simple linear regression principles, perform simple linear regression parameters, and test their regression parameters.	1. Know the definition of simple linear regression 2.Perform a regression coefficient calculation with the Smallest Square Method 3.Suspect diversity of errors 4.Perform hypothesis testing of regression parameters 5.Calculates the model feasibility measure: coefficient of determination	1. Accuracy in explaining simple linear regression 2. Accuracy in guessing regression coefficients with OLS 3. Accuracy in performing parameter tests 4. Interpreting the Coefficient of Determination	Form of learning: Practicum and Self-Task Learning Methods: Research-based learning Student learning experience: 1. Analyze the observation data in the field with statistical software applications 2. Perform regression analysis with OLS method 3. Perform Parameter and interpretation tests	Form of College learning Learning Methods: Research-based learning Student learning experience: 1. Perform regression analysis 2. Interpret the results of the analysis	Study: 100 minutes Independent Work: 2x60 minutes PT: 2x 60 minutes Practicum: 2x170 minutes	Sedehana Regression Analysis Book: Use 3 mandatory libraries	10
12-13	Sub CPMK-5	1. Know the meaning of	1. Accuracy in explaining	Form of learning:	Form of College learning	Study: 100 minutes	Multiple Regression Analysis	10

| Week 1 | Final Ability of Each Learning Stage (Sub CPMK) | Valuation | | Form of Learning; Learning Methods and Media; Student Learning Experience | | Estimated Time | Details of Learning Materials; Book | Assessment Weights |
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
	Students can explain the principles of multiple linear regression, perform multiple linear regression parameters, and test their regression parameters.	multiple linear regressions 2. Perform a regression coefficient calculation with the Smallest Square Method 3. Suspect diversity of errors 4. Testing classic assumptions on regression 5. Perform hypothesis testing of regression parameters 6. Calculates the model feasibility measure: coefficient of determination	multiple linear regressions 2. Accuracy in guessing regression coefficients with OLS 3. Accuracy in performing tests of classical assumptions and parameters 4. Interpreting	Practicum and Self-Task **Learning Methods:** Research-based learning **Student learning experience:** 1. Analyze the observation data in the field with statistical software applications 2. Perform multiple regression analysis with OLS method 3. Test classical assumptions of regression and parameters and perform interpretations	**Learning** Methods: Research-based learning **Student learning experience:** 1. Perform regression analysis 2. Interpret the results of the analysis	Independent Work: 2x60 minutes PT: 2x 60 minutes Practicum: 2x170 minutes	Book: Use 3 mandatory libraries	
14	Sub CPMK-6	1. Know the definition of	1. Accuracy in distinguishing	Form of learning:	Form of College learning	PB: 100 minutes	Non Parametric Statistics	5

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Valuation		Form of Learning; Learning Methods and Media; Student Learning Experience		Estimated Time	Details of Learning Materials; Book	Assessment Weights
		Assessment Indicator	Assessment Criteria and Techniques	Offline	Online			
	Students can explain the principles in non-parametric statistics.	non-parametric statistics 2. Perform non-parametric statistical testing with Wilcoxon, Kruskal-Wallis, and runtun approaches	parametric and nonmetric statistics 2. Accuracy in conducting hypothetical tests with non-parametric statistical methods	Practicum and Self-Task **Learning Methods:** Research-based learning **Student learning experience:** 1. Analyze the observation data in the field with statistical software applications 2. Perform non-parametric statistical analysis 3. Interpret	**Learning** Methods: Research-based learning **Student learning experience:** 1. Perform analysis with non-parametric statistical methods 2. Interpret the results of the analysis	MILES: 2x60 minutes PT: 2x 60 minutes Research / Practicum: 2x170 minutes	Book: Use 3 mandatory libraries	
UAS								

LEARNING ACHIEVEMENT COURSES ASSESMENT (CP-MK)

Courses	Statistics
Semester	III
Course Code	MKW60707
College Courses	
MK Preconditions	Mathematical Economics
RPS Developer Lecturer	Dr. Ir. Bambang Siswadi, MP.

ISLAMIC UNIVERSITY OF MALANG

2019

ASSESSMENT MATRIC OF LEARNING ACHIEVEMENT COURSES (CP-MK)

Course: Statistics
Semester: I (one)
Lecturer: Dr. Ir. Bambang Siswadi, MP.
Study Program: Agribusiness

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
1	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.	CPMK 1 Exploring statistical theoretical concepts in agribusiness or agricultural socio- economic systems	Sub CPMK-1 Students can explain the scope of statistics in general, identifying the realm of descriptive statistics and inferentialstatistics. Understand the type of measurement scale	1. Able to understand the definition of statistics, differences in descriptive statistics and inference. 2. Know the definition of a changer and various kinds of worshipers. 3. Able to distinguish the type of measurement scale (nominal, ordinal,	Assessment techniques: Non-tests/Self-task Instruments: Questions of chapter 1	5	5	76	12	76%

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
				interval, ratio)						
2-3	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness. ILO 3 Have the ability to identify and formulate problems arising in the field of Agribusiness and or the field of Economics / Agricultural Economics	CPMK 1 Exploring statistical theoretical concepts in agribusiness or agricultural socio-economic systems	Sub CPMK-1 Students can explain the principles of statistical description, create descriptions of a wad of data, calculate location size and diversity, and can explore data graphically.	1. Calculate the distribution of frequencies, cumulative frequencie 2. Create a graphic presentatio 3. Create a diagram 4. Calculate location size (average, average, median, and mode) 5. Calculate the measure of diversity (range, variety and standard deviation)	Assessment techniques: Non-tests/Self-task Instruments: Questions of chapter 2	5	5	76	12	76%

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	ILO 5 Able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical specific problems related to Agribusiness.			6. Calculate the percentile and quartile 7. Create a line box diagram						
4	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.	CPMK 2 Exploring statistical applications in agribusiness or agricultural socio-economic systems	Sub CPMK-2 Students will be able to explain the population, and examples and concepts of sample withdrawal.	1. Accuracy of explanation of population differences and examples 2. Accuracy of explanation of some example withdrawal methods	Assessment techniques: Non-tests/Self-task Instruments: Questions of chapter 3	5	5	76	40	76%

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness			3. Accuracy of explanation and counting on assessment indicators						
5	ILO 5 Able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical specific problems related to Agribusiness.

ILO 6 Students can explain and can apply the basic principles of statistical | CPMK 3 Able to analyze the phenomenon of problems in the field of agribusiness and socio-economic agriculture | Sub CPMK-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 | 1. Accuracy of explanation of estimates/ estimates 2. Accuracy calculates point estimates and interval estimates 3. Accuracy of explanation and counting on assessment indicators | Assessment techniques: Non-tests/Self-task

Practicum performance assessment

Instruments: Questions of chapter 4 | 2,5

7,5 | 10 | 76 | 4,0 | 76% |

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	methods in the field of Agribusiness		the average population with a certain level of accuracy.							
6	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.

ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness | CPMK 4 Able to test parameters with statistical methods, both inscript and inference. | Sub CPMK-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 | 1. Accuracy of explanation of hypothesis testing concept 2. Accuracy of explanation and counting on assessment indicators | Assessment techniques: Non-test/Task Assessment of group practicum performances

Instruments: Rubric assessment of practicum work performance | 5 5 | 10 | 70 | 40 | 70 |

Week 1	CPL (%)	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
			two proportions, the principle of correlation, simple linear regression principles, and perform simple linear regression parameters, and test their regression parameters.							
7	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness. ILO 6	CPMK 4 Able to test parameters with statistical methods, both inscript and inference.	Sub CPMK-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	1.Perform hypothesis testing for population variety (square khi test) 2.Know the relationship of sample size and test effectiveness	Assessment techniques: Non-tests/Self-task Instruments: Questions of Chapter 5	5	5	70	40	70

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness		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.							

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
8	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.

ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness | CPMK 4 Able to test parameters with statistical methods, both inscript and inference. | Sub CPMK-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 | 1. Calculate trust intervals and test hypotheses for differences of two population averages (free and paired examples). 2. Perform tests for three middle-value population (Anova) | Assessment techniques: Non-tests/Self-task | 5 | 5 | 70 | 40 | 70 |

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
			regression principles, and perform simple linear regression parameters, and test their regression parameters.							
UTS										
9	ILO 5 Able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical	CPMK 4 Able to test parameters with statistical methods, both inscript and inference.	Sub CPMK-4 Students can explain the principles of the hypothesis test, perform a hypothesis test on averages, and	1. Knowing the understanding and concept of correlation, 2. Know how to calculate	Assessment techniques: Non-tests/Self-task	5	5	70	40	70%

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	specific problems related to Agribusiness. ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness. ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness		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.	correlations						

Week 1 %	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
10-11	ILO 5 Able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical specific problems related to Agribusiness.

ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.

ILO 6 | CPMK 4 Able to test parameters with statistical methods, both inscript and inference. | Sub CPMK-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 | 1.Knowing the definition of simple linear regression

2.Perform the restoration of regression coefficients with the Smallest Square Method

3.Suspect diversity of errors

4.Perform hypothesis testing of regression parameters
5. Calculate the model's feasibility measure: coefficient of determinatio n | Assessment techniques: Non-tests/Self-task | 5 | 5 | 70 | 40 | 70% |

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness		regression principles, and perform simple linear regression parameters, and test their regression parameters.							
12-13	ILO 5 Able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical specific problems related to Agribusiness.

ILO 1 Students can explain the basic principles of statistical methods, and can apply some | CPMK 5 Able to interpret the results of analysis and parameter testing, | Sub CPMK-5 Students can explain the principles of multiple linear regression, perform multiple linear regression parameters, and test their regression parameters. | 1.Know the meaning of multiple linear regression

2.Perform the restoration of regression coefficients with the Smallest Square Method

3.Suspect diversity of errors
4. Perform classical assumption | Assessment techniques: Non-tests/Self-task | 5 | 5 | 76 | 15,3 | 76% |

Week 1	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness. ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness			testing on regression 5.Perform hypothesis testing of regression parameters 6. Calculate the model's feasibility measure: coefficient of determination						
14	ILO 1 Students can explain the basic principles of statistical methods, and can apply some simple statistical methods to analyze data in various cases, especially in agriculture/ agribusiness.	CPMK 6 Able to draw conclusions and provide policy recommendations on the phenomenon of agricultural problems in the socio-economic field of agriculture.	Sub CPMK-6 Students can explain the principles in non-parametric statistics.	1.Know the definition of non-parametric statistics 2. Perform non-parametric statistical testing with Wilcoxon, Kruskal-Wallis, and	Assessment techniques: Non-tests/Self-task group	5	5	76	4,0	76%

Week 1 %	CPL	CPMK	Sub-CPMK	Indicators	Assessment Technique - Assessment Instrument- Weight (%)		Weight (%) Sub-CPMK	Student Grades (0-100)	Σ (Student Grade) X (Weights %)	CPL's ability to MK (%)
	ILO 6 Students can explain and can apply the basic principles of statistical methods in the field of Agribusiness			runtun approaches						
UAS										
					Total Weight (%)	100	100			
					Student Daily Score(Σ (Student Grade) X (Weight%))					
					Course Final Value ((3 x Daily Value) + (2 x UTS Value) + (3 x UAS Grade))/8					

FINAL GRADE STUDENTS MATRIC RECAP

No.	NPM	NAMA	MATRIK REKAP NILAI AKHIR MAHASISWA															
			SUB-CPMK/BOBOT (NILAI HARIAN)												NILAI HARIAN		UTS	UAS	angka	HURUF
			1		2		3		4		5		6							
			skala 4*15%		skala 4 *5%		skala 4*5%		skala 4*50%		skala 4*20%		skala 4*5%		Skala 4	Skala 100				
1	21801032024	NURUT TAMAM HIDAYAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	E
2	21801032067	DILLA RISKA SETYAWATI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	90	90	89,25	A
3	21801032068	ULFA TRI NOVITASARI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	90	80	85,5	A
4	21801032069	MELYANA FEBRYANTARI WA	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	80	90	86,75	A
5	21801032070	SAYYID KHOSIM MIKA JAY	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	88	80	60	75,5	B
6	21801032073	MUTMAINAH	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	80	70	74,9	B
7	21801032074	ANIS MAULA NOVIANA PUT	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	88	70	70	76,75	B
8	21801032075	JUMROTIN NUR AINI	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	90	70	77,4	B
9	21801032076	AISYAH RODIYANI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	90	80	85,5	A
10	21801032077	LUTHFI ALFIAN	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	76,4	80	95	84,275	A
11	21801032078	AHMAD FARHAN FIRMANSYA	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	76,4	90	90	84,9	A
12	21801032079	KHOLILATUN NAFISAH	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	96	70	80	83,5	A
13	21801032080	RIKA SAFIRA DEWI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	90	86	87,75	A
14	21801032081	TANIA AFIFA NUR KHOIRI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	88	85	90	88	A
15	21801032083	RISDYA WULAN SARI	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	80	80	78,65	B
16	21801032084	HILMI ULIN NUHA	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	3,75	E
17	21801032086	SITI FATIMATUS ZAHRO	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	93,7	60	75	78,2625	B
18	21801032087	MOCH. IQBAL	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	93,7	70	60	75,1375	B
19	21801032088	DIMAS ADIATAMA	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	80	75	76,775	B
20	21801032089	LILY DEVITASARI	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	80	70	74,9	B
21	21801032090	HANDAYU DWI LESTARI	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	76,4	90	90	84,9	A
22	21801032091	ELIF ELIA HASANAH	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	76,4	90	90	84,9	A
23	21801032092	NUR MUHAMMAD IQBAL	0	0	0	0	0	0	0	0	0	0	0	0	0	12,25	0	0	4,59375	E
24	21801032093	UMI KHOLILIYAH	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	93,7	75	90	87,6375	A
25	21801032094	MUHAMMAD DAFFA SYAFIUD	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	70	80	76,15	B
26	21801032096	CHYNDY NUR AIDHA	0	0,6	0	0,2	0	0,2	0	2	0	0	0	0,2	3,2	41,4	0	0	15,525	E
27	21801032097	AYSAH PRITA MAULIDYA	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	106	80	70	86	A
28	21801032098	WOFIR	3	0,45	3	0,15	3	0,15	3	1,5	3	0,6	3	0,15	3	76,4	90	70	77,4	B
29	21801032099	CHOIRUNNISA	4	0,6	4	0,2	4	0,2	4	2	4	0,8	4	0,2	4	76,4	90	90	84,9	A
rata rata			3,068966	0,481034483	3,068966	0,160344828	3,068966	0,160344828	3,068966	1,603448276	3,068966	0,613793103	3,068966	0,160344828						
konversi			76,72414	12,02586207	76,72414	4,00862069	76,72414	4,00862069	76,72414	40,0862069	76,72414	15,34482759	76,72414	4,00862069	Prosentase Nilai Mahasiswa A				43,75	%
															Prosentase Nilai Mahasiswa B				43,75	%
															Prosentase Nilai Mahasiswa C				0	%
															Prosentase Nilai Mahasiswa D				0	%
															Prosentase Nilai Mahasiswa E				12,5	%
															Nilai mahasiswa lulus				87,5	%
		12,5													Nilai Mahasiswa tidak lulus				12,5	

Description:

* : Student Daily Score = Σ Student Score (which has been multiplied by the weight of each sub-CPMK))

** : Final Grade of Course = ((3 x Average DailyValue) + (2 x UTS Value) + (3 x UAS Value)/8