



SEMESTER LEARNING PLAN (RPS)

Courses	Operation Research
Semester	V(Five)
Course Code	MKW60718
College Courses	
MK Preconditions	Introduction to Agribusiness
RPS Developer Lecturer	Titis Surya Maha Rianti, SP., MP.
Mk Master Lecturer	Titis Surya Maha Rianti, SP., MP. Dr. Ir. Bambang Siswadi, MP.
Authentication Date	
Courses	Agribusiness
Faculty	Agriculture



ISLAMIC UNIVERSITY OF MALANG
FACULTY OF AGRICULTURE
AGRIBUSINESS STUDY PROGRAM

SEMESTER LEARNING PLAN (RPS)

Courses/Semesters	Master Lecturer	Course Code	Credit Weight: 3
Operation Research	Titis Surya Maha Rianti, SP., MP. Dr. Ir. Bambang Siswadi, MP.	MKW 60718	Theory: 40 % Practice: 60 %
Authorization/Endorsement	RPS Developer Lecturer	Head of Study Program	Vice Dean I
	Titis Surya Maha Rianti, SP., MP.	Dr. Dwi Susilowati, SP., MP.	Dr. Ir. Anis Sholihah, M.P.
Learning Achievements	Graduate Learning Achievement (CPL) Study Program Charged in Courses		
	ILO10 Behaves in accordance with the code of ethics and professional responsibilities of agribusiness entrepreneurs including marketing management, acquisition project management, human resource management and control		
	ILO5 Is able to apply a variety of fundamentally oriented methods to solve certain practical problems related to agribusiness		
	ILO8 Able to solve problems, topics and processes related to the achievement of agribusiness in accordance with concepts and strategies in problem solving		
	ILO4 Is able to understand project management methods of business practices, risks, and change in an increasingly competitive environment		
	Learning Achievement Courses (CP-MK)		
	Able to master the concept of operations research and be able to apply it in optimal decision making		

	CPMK 2 Able to solve company operating cases with linear programming both graphical and method
	CPMK 3 Able to solve simplex and can perform post-optimal test
	CPMK 4 Able to control material inventory in the company and determine the right transportation method that can minimize costs or maximize contribution
	CPMK 5 Able to evaluate project planning through sales forecasting and or market demand as well as
	CPMK 6 Able to evaluate and manage scheduling and manage projects efficiently
	CPMK 7 Able to manage business with minimum costs/assignments
	CPMK 8 Able to manage supply chain appropriately
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 have competence in resolving the company's operations management problems so that they can take optimal operating decisions.
Brief Description of Course	This course learns about how to make optimal decisions on the company's operating problems. Through this course, it is expected that students can solve problems related to the company's operations. What is studied in this course includes decision making, completion of company optimization with linear programs, inventory control, transportation methods, forecasting, scheduling and project management, assignment and supply chain management.
Learning Materials:	<ol style="list-style-type: none"> 1. Basic concepts and decision making 2. Linear program 3. Inventory control 4. Method of transportation 5. Forecasting 6. Project scheduling and management 7. Assignment 8. Supply chain management (scm)
Book	<p>Main:</p> <ol style="list-style-type: none"> 1. Haming M, et al. 2019. <i>Operation Research: Optimal Decision Making Techniques</i>. Jakarta: PT. Earth Script. 2. Hamdy A. Taha. 2017. <i>Operation Research an Introduction, 10th Edition</i>. Pearson Education Limited. 3. Lyeme H & Seleman M. 2012. <i>Introduction to Operations Research: Theory and Applications</i>. Lambert Academic Publishing. 4. Ravindran A. Ravi. 2008. <i>Operation Research and Management Science Handbook</i>. CRC Press and Taylor & Francis Group. 5. Hillier F & Lieberman Gerald J. 2010. <i>Introduction to Operation Research</i>. New York: McGraw-Hill. <p>Supporter:</p> <ol style="list-style-type: none"> 1. Journal of Operations Research

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 Weight (%)
		Assessment Indicator	Assessment Criteria and Techniques				
1	Sub CPMK 1 Students are able to study optimal operations and decision-making research based on the nature of resources and environmental conditions.	<ol style="list-style-type: none"> Students are able to understand operation research. Students are able to make optimal decisions. Students are able to master the operating research analysis model Students are able to examine the nature of resources and the decision environment. 	Assessment Criteria: <ol style="list-style-type: none"> Accuracy in reviewing operations research Accuracy in making operating decisions Accuracy in explaining the operating research analysis model Accuracy in examining the nature of resources Assessment Techniques: <ol style="list-style-type: none"> Performance Assessment (Observation of performances during discussions) Task assessment (about decision-making case essays) 	Form of learning: College, Airy Visit Learning Methods: <i>Small Group Discussion</i> <i>Case Study</i> Media: Presentation Media Student Learning Experience <ol style="list-style-type: none"> Making opinion about the understanding and scope of operation research Looking at the explanation of the settlement of decision-making cases Working on decision-making case essay tasks 	College: 100 min PT: 2x60 min MILES: 2x60 min	INTRODUCTION OPERATIONS RESEARCH <ol style="list-style-type: none"> Understanding <i>operation research</i> Decision-making process Operation research analysis model Nature of resources and decision environment Book: Mandatory libraries 1, 2, 3	10
2 - 4	Sub CPMK 2 Able to take optimal decisions with linear program calculations	<ol style="list-style-type: none"> Students are able to study linear programs and infer their usefulness. Students are able to solve and take maximization and 	Assessment Criteria: <ol style="list-style-type: none"> Accuracy of answering during discussion Conformity of calculation results in 	Form of learning: College, Practicum Learning Methods: <i>Small Group Discussion</i> <i>Case Study</i>	College: 100 min PT: 2x60 min MILES:	LINEAR PROGRAM <ol style="list-style-type: none"> Understanding and usability of linear programs Troubleshooting and minimizing programs 	20

		<p>minimization program decisions with graphing methods</p> <p>3. Students are able to solve and take maximization and minimization program decisions with simplex methods.</p> <p>4. Mahaiswa can perform optimal post-tests of decisions taken</p>	<p>optimization questions</p> <p>Assessment Techniques:</p> <p>1. Job Performance Assessment (Observation during discussion)</p> <p>2. Assignment (solving the optimization program essay problem)</p>	<p>Media: Presentation Media and Analytical Media (QM for Windows Software)</p> <p>Student Learning Experience</p> <p>1. Understand the understanding and usefulness of linear programs</p> <p>2. Solves maximization and minimization programs with graph and simplex methods</p> <p>3. Perform optimal post-testing of optimal solving decisions taken</p>	<p>2x60 min</p> <p>Practicum 2x170 min</p>	<p>with graphing methods</p> <p>3. Solving maximization and minimization programs with simplex methods</p> <p>4. Post-Optimal Test</p> <p>Book: Mandatory libraries 1, 2,3, 5</p>	
5	<p>Sub CPMK 3</p> <p>Students are able to control the supply of raw materials optimally</p>	<p>1. Students are able to review inventory control.</p> <p>2. Students are able to master the characteristics of the inventory model</p> <p>3. Students are able to solve supply problems in the company</p>	<p>Assessment Criteria:</p> <p>1. Accuracy of answering when Q&A</p> <p>2. Student activity in discussion forums</p> <p>3. Suitability of inventory breakdown results</p> <p>Assessment Techniques:</p> <p>1. Assessment of Work Performance results of airy visits</p> <p>2. Praktikum breakdown and collection of inventory schedules</p>	<p>Form of Learning: College, Practicum</p> <p>Method: Discussion and pугasan</p> <p>Media: Print Media (Articles, References), Presentation Media and Analytical Media (QM software for Windows)</p> <p>Learning Experience:</p> <p>1. Listening to the explanation of the importance of inventory control</p> <p>2. Resolve inventory problems with appropriate control methods</p> <p>3. Practicum calculates optimum inventory by EOQ method</p>	<p>College: 100 min</p> <p>PT: 2x60 min</p> <p>MILES: 2x60 min</p> <p>Practicum 1x170 min</p>	<p>INVENTORY CONTROL</p> <p>1. Terms in inventory control</p> <p>2. Characteristics of the inventory model</p> <p>Book: Library must be 1, 2, 5</p>	10
Week 1	Final Ability of Each Learning Stage (Sub	Valuation		Form of Learning; Learning Methods and Media; Student	Estimated Time	Details of Learning	Assessment Weight

	CPMK)	Assessment Indicator	Assessment Criteria and Techniques	Learning Experience		Materials; Book	(%)
6-7	Sub CPMK 4 Able to solve transportation cases at minimum cost	<ol style="list-style-type: none"> Students can study transportation programs and projects. Students can solve transportation cases. Students can analyze transshipment. Students can set a project schedule. 	Assessment criteria <ol style="list-style-type: none"> Liveliness in the classroom Accuracy of answering during discussions and Q&A Assessment Techniques: <ol style="list-style-type: none"> Performance Assessment (Observation of performances during discussions) Transportation case solving practicum 	Form of Learning: College, Practicum Method: <i>Problem based learning</i> Media: Presentation Media and Analytical Media (QM for Windows Software) Learning Experience: <ol style="list-style-type: none"> Listen to the explanation of transportation programs and project management Solve the lowest cost transportation case 	College: 100 min PT: 2x60 min MILES: 2x60 min Practicum 2x170 min	TRANSPORTATION PROGRAMS AND PROJECT MAJEMEN <ol style="list-style-type: none"> Understanding transportation and transshipment programs Solving transportation cases in minimization and maximization programs Transshipment analysis Book: Library must be 1, 2,5	10
Middle Test							
8	Sub CPMK 5 Able to forecast the demand or sales of an industrial product	<ol style="list-style-type: none"> Students explain the meaning and benefits of forecasting Students master the types of forecasting. Students study forecasting methods Students are able to forecast demand with trending methods 	Assessment Criteria: <ol style="list-style-type: none"> Correctness in explaining forecasting Accuracy in calculating trends Assessment Techniques: <ol style="list-style-type: none"> Performance Rating (forecasting sales) 	Form of Learning: College, Practicum Learning Methods: <i>Problem based learning</i> Media: Presentation media and Analytical Media (QM for Windows Software) Learning Experience: <ol style="list-style-type: none"> Listen to forecasting explanations Forecasting product sales and demand 	College: 100 min PT: 2x60 min MILES: 2x60 min Practicum 1x170 min	FORECASTING (FORECASTING) <ol style="list-style-type: none"> Understanding forecasting Types of forecasting Forecasting methods Calculation of trend methods Book: Support Library 1	10
			Valuation	Form of Learning; Learning			

Week 1	Final Ability of Each Learning Stage (Sub CPMK)	Assessment Indicator	Assessment Criteria and Techniques	Methods and Media; Learnstudents	Estimated Time	Details of Learning Materials; Book	Assessment Weight (%)
9-10	Sub CPMK 6 Able to schedule a project with the right methods	<ol style="list-style-type: none"> Students can master project scheduling methods Students can arrange project scheduling Students master scheduling types 	<p>Assessment Criteria:</p> <ol style="list-style-type: none"> Accuracy in arguing about scheduling Accuracy mentions type and describes scheduling methods Accuracy in planning project scheduling or production <p>Assessment Techniques:</p> <ol style="list-style-type: none"> Performance Assessment (Discussion and Q&A project scheduling) Attitude Assessment (when describing project scheduling results) 	<p>Form of Learning: College, Practicum</p> <p>Method: <i>Problem based learning</i></p> <p>Media: Presentation Media and Analytical Media (QM for Windows Software)</p> <p>Learning Experience:</p> <ol style="list-style-type: none"> Listen to project scheduling materials Learn the type of scheduling and its methods Calculate the exact project schedule with CPM and PERT methods 	<p>College: 100 min</p> <p>PT: 2x60 min</p> <p>MILES: 2x60 min</p> <p>2 x 170</p>	<p>SCHEDULING AND PROJECT MANAGEMENT</p> <ol style="list-style-type: none"> Understanding the project Project scheduling (CPM and PERT methods) Acceleration and financing of projects Scheduling type Production scheduling Schedule work <p>Book: Library required 1, & 4</p>	15
11-12	Sub CPMK 7 Students are able to determine loading or assignment on machines or workers at a minimum cost.	<ol style="list-style-type: none"> Students are able to master the theory of assignment / loading Students can provide a sacrifice for fee minimization Students can provide sacrifices for maximization of contributions 	<p>Assessment Criteria</p> <ol style="list-style-type: none"> Accuracy in studying assignment theory/ loading Accuracy in providing loading for cost minimization and contribution maximization <p>Assessment Techniques:</p> <ol style="list-style-type: none"> Performance Assessment (discussion and Q&A Physiological aspects of food crops) 	<p>Form of Learning: Lecture</p> <p>Method: <i>Problem based learning</i></p> <p>Media: Presentation Media and Analytical Media (QM for Windows Software)</p> <p>Learning Experience</p> <ol style="list-style-type: none"> Listening to loading/assignment materials Calculate loading and determine the proper loading of production activities 	<p>College: 100 min</p> <p>PT: 2x60 min</p> <p>MILES: 2x60 min</p> <p>Practicum 2 x 170</p>	<p>ASSIGNMENT METHOD / ASSIGNMENT/ LOADING</p> <ol style="list-style-type: none"> Understanding Assignment Assignment application for fee minimization Assignment/loading application for contribution maximization <p>Book: Mandatory library 1 & 5</p>	10

			2. Assessment of practicum results calculates loading				
13-14	Sub CPMK 8 Students can evaluate the case of supply chain management of a product	<ol style="list-style-type: none"> Students are able to study supply chain management theory Students can master inventory management in the supply chain Students can master transportation management in the supply chain Students can master location management in the supply chain 	<p>Assessment Criteria:</p> <ol style="list-style-type: none"> Accuracy in explaining supply chain theory Accuracy in evaluating inventory, transportation and location cases in the supply chain <p>Assessment Techniques:</p> <ol style="list-style-type: none"> Performance Assessment (discussion and Q&A supply chain management) Assessment of SCM evaluation results 	<p>Form of Learning: College, Practicum</p> <p>Method: <i>Problem based learning</i></p> <p>Media: Presentation Media and Visual Audio Media</p> <p>Learning Experience:</p> <ol style="list-style-type: none"> Listen to the explanation of supply chain management Doing supply chain management of a product 	<p>College: 100 min</p> <p>PT: 2x60 min</p> <p>MILES: 2x60 min</p> <p>Practicum 2 x 170</p>	<p>SUPPLY CHAIN MANAGEMENT (SCM)</p> <ol style="list-style-type: none"> Understanding supply chain management theory Inventory management in the supply chain Transportation management in the supply chain Location management on the supply chain <p>Book: Mandatory library 2 & 4</p>	15
Final Exam							



ASSESSMENT OF COURSE LEARNING ACHIEVEMENT (CP-MK)

Courses	Operation Research
Semester	V(Five)
Course Code	MKW60718
College Courses	
MK Preconditions	Introduction to Agribusiness
RPS Developer Lecturer	Titis Surya Maha Rianti, SP., MP.
Mk Master Lecturer	Titis Surya Maha Rianti, SP., MP. Dr. Ir. Bambang Siswadi, MP.
Authentication Date	
Courses	Agribusiness
Faculty	Agriculture

ISLAMIC UNIVERSITY OF MALANG
2019

MATRIC ASSESSMENT OF LEARNING ACHIEVEMENT COURSES (CP-MK)

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	ILO4 Understand project management methods, business practices, risks and increasingly competitive environmental changes	CPMK 1 Able to master the concept of operations research and be able to apply it in optimal decision making	Sub CPMK 1 Students are able to study optimal operations and decision-making research based on the nature of resources and environmental conditions.	<ol style="list-style-type: none"> Students are able to understand operation research. Students are able to make optimal decisions. Students are able to master the operating research analysis model Students are able to examine the nature of resources and the decision environment. 	Assessment techniques: Non-tests/Self-task	5	10	64,5	6,4	64%
2-4	ILO5 is able to combine theory and practice by applying a variety of fundamentally oriented	CPMK 2 Able to solve company operating cases with linear programming both	Sub CPMK 2 Able to take optimal decisions with linear program calculations	<ol style="list-style-type: none"> Students are able to study linear programs and infer their usefulness. Students are able to solve 	Assessment techniques: Non-tests/Self-task	5	20	60,3	12,1	60%
					Practicum performance assessment	10				
						5				

	<p>methods to solve practical specific problems related to Agribusiness.</p> <p>ILO8 Is Able to solve problems, topics, and processes related to Agribusiness Entrepreneurs according to concepts and strategies to solve problems.</p>	graphical and method		<p>and take maximization and minimization program decisions with graphing methods</p> <p>3. Students are able to solve and take maximization and minimization program decisions with simplex methods.</p> <p>4. Mahaiswa can perform optimal post-tests of decisions taken</p>	Instruments: Questions of chapter 2					
5	<p>ILO10 Berperilaku in accordance with the code of ethics and professional responsibilities of Agribusiness Entrepreneurs including management</p>	<p>CPMK 3 Able to solve simplex and can perform post-optimal test</p>	<p>Sub CPMK 3 Students are able to control the supply of raw materials optimally</p>	<p>1. Students are able to study the control of the</p> <p>2. Students are able to master the characteristics of the inventory model</p> <p>3. Students are able to solve supply problems in the company</p>	<p>Assessment techniques: Non-tests/Self-task Practicum performance assessment</p> <p>Instruments: Questions of chapter 3</p>	5	10	59,3	5,9	59%

	and marketing, project management, acquisition, personnel management, control.									
6-7	ILO10 Berperilaku in accordance with the code of ethics and professional responsibilities of Agribusiness Entrepreneurs including management and marketing, project management, acquisition, personnel management, control.	CPMK 4 Able to control material inventory in the company and determine the right transportation method that can minimize costs or maximize contribution	Sub CPMK 4 Able to solve transportation cases at minimum cost	<ol style="list-style-type: none"> 1. Students can study transportation programs and projects. 2. Students can solve transportation cases. 3. Students can analyze transshipment . 4. Students can set a project schedule. 	Assessment techniques: Non-tests/Self-task Practicum performance assessment Instruments: Questions of chapter 4	5 5	10	59,6	6	59,6%
Middle test										
8	ILO4 Understand project management methods, business	CPMK 5 Able to evaluate project planning through sales forecasting and or	Sub CPMK 5 Able to forecast the demand or sales of an industrial product	<ol style="list-style-type: none"> 1. Students explain the meaning and benefits of forecasting 2. Students master the types of forecasting. 	Assessment techniques: Non-tests/Self-task Practicum performance assessment Instruments:	5 5	10	63,6	9,5	64%

	practices,risks and increasingly competitive environmental changes	market demand as well as		<ol style="list-style-type: none"> Students study forecasting methods Students are able to forecast demand with trending methods 	Rubric assessment of practicum work performance					
9-10	<p>ILO4 Understand project management methods, business practices,risks and increasingly competitive environmental changes</p> <p>ILO10 Berperilaku in accordance with the code of ethics and professional responsibilities of Agribusiness Entrepreneurs including</p>	CPMK 6 Able to evaluate and manage scheduling and manage projects efficiently	Sub CPMK 6 Able to schedule a project with the right methods	<ol style="list-style-type: none"> Students can master project scheduling methods Students can arrange project scheduling Students master scheduling types 	<p>Assessment techniques: Non-tests/Self-task Practicum performance assessment</p> <p>Instruments: Questions of Chapter 5</p>	10	15	67,8	10,2	68%

	management and marketing, project management, acquisition, personnel management, control.									
11-12	ILO8 Is Able to solve problems, topics, and processes related to Agribusiness Entrepreneurs according to concepts and strategies to solve problems.	CPMK 7 Able to manage business with minimum costs/assignments	Sub CPMK 7 Students are able to determine loading or assignment on machines or workers at a minimum cost.	<ol style="list-style-type: none"> 1. Students are able to master the theory of assignment / loading 2. Students can provide a sacrifice for fee minimization 3. Students can provide sacrifices for maximization of contributions 	Assessment techniques: Non-test/Task Self-employed practicum performance assessment	10	10	68,9	6,9	70%
13-14	ILO5 is able to combine theory and practice by applying a variety of fundamentally oriented methods to solve practical specific	CPMK 5 Able to manage supply chain appropriately	Sub CPMK 8 Students can evaluate the case of supply chain management of a product	<ol style="list-style-type: none"> 1. Students are able to study supply chain management theory 2. Students can master inventory management in the supply chain 	Assessment techniques: Non-test/Task Assessment of group practicum performances	15	15	73,5	11	73,5%

	problems related to Agribusiness. ILO10 Berperilaku in accordance with the code of ethics and professional responsibilities of Agribusiness Entrepreneurs including management and marketing, project management, acquisition, personnel management, control.			3. Students can master transportation management in the supply chain 4. Students can master location management in the supply chain						
FINAL SEMESTER EXAM (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										

STUDENT FINAL GRADE RECAP MATRIX

MATRIK REKAP NILAI AKHIR MAHASISWA																				NILAI HARIAN		UTS	UAS	angka	HURUF
No.	NPM	NAMA	SUB-CPMK/BOBOT (NILAI HARIAN)																						
			1		2		3		4		5		6		7		8		Skala 4	Skala 100					
			skala 4*10%		skala 4 *20%		skala 4*10%		skala 4*10%		skala 4*10%		skala 4*15%		skala*10%		skala*15%								
1	21401032053	MUHAMMAD EKO SAKTI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	E	
2	21601032037	ARIEF BUDI HARJA	1	0.1	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1	58	50	47	51.875	D	
3	21601032048	MUH. KHAERUN NASIKIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43.85	0	0	16.44375	E	
4	21601032090	ARIE YUDHISTIRA SUHERM	1	0.1	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1	76.3	40	35	51.7375	D	
5	21701032002	WIDYATI	3	0.3	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.2	76.3	80	75	76.7375	B	
6	21701032003	RISKI DWI ELVIANTI	3	0.3	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	3	72.7	80	75	75.3875	B	
7	21701032004	FIDELINO CARVALHO	3	0.3	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.2	76.3	70	70	72.3625	B	
8	21701032006	JA'FAR ABDURRAHMAN	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	70	80	74.7625	C	
9	21701032007	MOH. NANDA AL AZIZ	2	0.2	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.1	76.3	65	60	67.3625	C	
10	21701032009	NOVIA KRISTIANINGSIH	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	64	60	65.7625	C	
11	21701032011	NURWAHIDAH	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	65	60	66.0125	C	
12	21701032012	SUPARDI	2	0.2	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.1	76.3	65	60	67.3625	C	
13	21701032013	MUHAMMAD SHOLAHUDDIN F	3	0.3	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.2	76.3	65	72	71.8625	B	
14	21701032016	BADRULLAH	2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	43.85	85	60	60.19375	C	
15	21701032017	DODIK EKA PRASETYO	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	70	60	67.2625	C	
16	21701032018	NADIA MISBAKHUL KHOIRO	4	0.4	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.3	76.3	86	85	81.9875	A	
17	21701032019	NUR CHAMILA	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	86	85	86.91875	A	
18	21701032020	AISYAH RAMADHANI	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	86	85	86.91875	A	
19	21701032021	JOHAN BUAMONA BOT	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	60	60	64.7625	C	
20	21701032022	KHOIRUR ROZIQIN	1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	7.5	85	50	42.8125	D	
21	21701032023	NUR CHOLIS	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	60	60	64.7625	C	
22	21701032024	DEFI WIDIYASARI	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	90	85	87.91875	A	
23	21701032025	FEBI NUR FITRIANA	4	0.4	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	3.1	72.7	96	96	87.2625	A	
24	21701032026	MOHAMMAT ISBATUL CHOIR	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	86	85	86.91875	A	
25	21701032027	IZZA NAILATUL IFAZAH	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	86	85	86.91875	A	
26	21701032029	DWI INDRAWAN	2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	86	80	51.5	C	
27	21701032030	DAVID PRASETYO ADI CAH	4	0.4	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.3	76.3	80	90	82.3625	A	
28	21701032031	ERWINUL MAKKI	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	70	70	71.0125	C	
29	21701032032	AHMAD SHALIHUDDIN	2	0.2	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	2.9	72.7	60	60	64.7625	C	
30	21701032033	FATHUR ROHMAN	2	0.2	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	3.8	89.45	70	60	73.54375	C	
31	21701032034	NEVA LIS SAFITRI	4	0.4	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.3	76.3	96	85	84.4875	A	
32	21701032035	AFRIANSYAH	2	0.2	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.1	76.3	55	60	64.8625	C	
33	21701032036	SATRIA HIDAYAT	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	90	90	89.79375	A	
34	21701032038	ADE SUKMA PANEMUAN	3	0.3	3	0.6	3	0.3	3	0.3	3	0.3	3	0.45	3	0.3	3	0.45	3	72.7	80	74	75.0125	B	
35	21701032039	IGO HANDIKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	2.25	E	
36	21701032040	SACICO DESI ANDRIANI	4	0.4	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.3	76.3	90	85	82.9875	A	
37	21701032042	LAILA NUR HAFIDHA	4	0.4	1	0.2	1	0.1	1	0.1	1	0.1	1	0.15	1	0.1	1	0.15	1.3	76.3	90	85	82.9875	A	
38	21701032043	SYAMSUL MA'ARIF	4	0.4	4	0.8	4	0.4	4	0.4	4	0.4	4	0.6	4	0.4	4	0.6	4	89.45	90	85	87.91875	A	
		rata rata	2.578947	0.257895	2.052632	0.410526	2.052632	0.205263	2.052632	0.205263	2.052632	0.205263	2.052632	0.307895	2.052632	0.205263	2.052632	0.307895		Prosentase Nilai Mahasiswa A			34.21053	%	
		konversi	64.47368	6.447368	51.31579	10.26316	51.31579	5.131579	51.31579	5.131579	51.31579	5.131579	51.31579	7.697368	51.31579	5.131579	51.31579	7.697368		Prosentase Nilai Mahasiswa B			13.15789	%	
																				Prosentase Nilai Mahasiswa C			39.47368	%	
																				Prosentase Nilai Mahasiswa D			5.263158	%	
																				Prosentase Nilai Mahasiswa E			7.894737	%	
																				Nilai mahasiswa lulus			92.10526	%	
																				Nilai Mahasiswa tidak lulus			7.894737		