

PORTFOLIO Department of Agrotechnology Faculty of Agriculture University of Islam Malang

Subject	Agricultural Physic
Module Level, if available	Undergraduate Study Program of Agrotechnology
Subject Code	MKW 60603
Type of course	Basic Science
Credits	3 credits/ 5.1 ECTS
Semester	1
Prerequisite	-
Parallel Class	A, B and C
Module Description	This course provides a deep understanding to students in solving and practicing physical problems that occur in nature, especially in the field of agricultural science that can affect the survival of plants, especially the basic physical rules related to the field of agricultural science. Learning activities are in the form of lectures and independent assignments, as well as field practicums and laboratories to assess and measure the physical processes that occur
Learning Outcomes	Course Learning Outcomes (CLO)
Dearning Outcomes	CLO 1: Comprehending theoretical concept of the application of physics in agriculture CLO 2: Being able to measure physical symptoms in
	agriculture
	CLO 3: Being able to apply, analyze the basic principles and concepts of fluid mechanics, the kinetic theory of gases and processes as well as the applicable laws to solve physical problems related to agriculture CLO 4: Being able to calculate heat, thermal energy, temperature, flow, electrostatics, light and electrostatic waves comprehensively and apply them in agriculture
Learning Content	After completing this subject students are able to: 1. Mastering the importance of measurement, quantities, systems of units and their conversions, vector and scalar basis to explain particle movements and their application in agriculture (movement of water, nutrients and other substances) both horizontally and horizontally 2. Review the concept of particle movement in one & two dimensions and its application in agriculture as well as the work and energy involved in the concept of movement and the laws involved in it 3. Apply and analyze the basic principles and concepts of fluid mechanics, gas kinetic theory and existing processes and applicable laws to solve problems related to agriculture 4. Mastering knowledge about heat and thermal energy, temperature, flow, electrostatics, light and electrostatic waves in a comprehensive and in-depth manner and can develop and apply them to study more developed

Aims	Students have competence to apply the learning outcomes of
	course Agricultural Physics in plant production systems both
	independently and in the industrial world of the agricultural
	and plantation sectors
Teaching Methods	Several methods applied in this course consist of lecturing,
	assignment, and group discussions. All these methods
	are applied on 3 parallel classes
Participant	A class: 30 students in total 1 th semester
	• B class: 29 students in total 1 th semester
	• C class: 27 students in total 1 th semester
Teaching Attendance	14 meetings were completely held (100%) by lecturer (A,B
	and C classes)
	From 30 students, 2 student were below 100% of attendance
	(A class)
	From 29 students, 3 student were below 100% of attendance
	(B class)
	From 27 students, 13 student were below 100% of
	attendance (C class)
Evaluation System	Component of assessment on this course consist of
	regular assignment, midle semester test and final
	semester test, presence and practice. All these
	component are then combined to obtain final score.
	Scoring matrices and question samples are available
	in Appendix 1 and Appendix 2
Learning Result	 Achievement CLO in A Class
	CLO $1 = 83.50$ (Excellent)
	CLO 2 = 84.00 (Excellent)
	CLO 3 = 79.00 (Excellent)
	CLO $4 = 82.00$ (Excellent)
	Achievement ILO in B Class
	CLO $1 = 80.00$ (Excellent),
	CLO 2 = 81.00 (Excellent),
	CLO 3 = 77.00 (Excellent)
	CLO 4 = 75.50 (Excellent)
	ego i veleo (gheoneile)
	 Achievement ILO in C Class
	CLO $1 = 71.00$ (Excellent),
	CLO $2 = 70.00$ (Satisfactory),
	CLO $3 = 68.00$ (Satisfactory),
	CLO 4 = 70,50 (Excellent)
	Complete achievement on average CLO can be seen on
	Appendix 3
Statistical Distribution	• A Class, score distribution: A = 15 students (50%) and B
2 3 SHOW DIGHT DIGHT	= 15 students (50%)
	• B Class, score distribution: A = 9 students
	(31%), $B = 18$ students (62%), $C = 1$ student
	(3%) and Failed = 1 students (3%)
	• C Class, score distribution: A = 5 students
	(19%), $B = 11$ students (41%), $C = 5$ student
	(19%), D = 1 student and Failed = 5 students

	(19%)
	(->)
	Complete achievement on each per student can be seen on Appendix 4
Teaching Observation	Materials were delivered in Indonesia. The student could understand the materials well.
	In A Class: there were 1 student poor on both CLO 1, 4 students poor on both CLO 2, 4 students poor on CLO 3 and 1 student poor on CLO 4.
	In B Class: there were 1 student poor on CLO 1, 6 students poor on CLO 2, 4 students poor on CLO 3 and 4 students poor on CLO 4.
	In C Class: there were 4 students poor on CLO 1, 8 students poor on CLO 2, 5 students poor on CLO 3 and 6 students poor on CLO 4.
Learning Constraints	A, B and C class: The lack of practical infrastructure causes students' understanding to be lacking
Recommendation	A Class: Paying more attention for students who hardly understand the materials
	B Class: Paying more attention for students who hardly understand the materials
	C Class: need special handling because most students are lazy to study

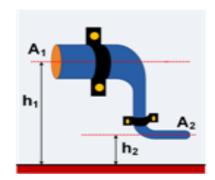
Appendix 1. Scoring Matrix

Nomenclature	Weight	Final Score						
		Letter Mark	Score average					
Assignment	15%	A	80 - 100					
Midle semester test	30%	В	70 -<80					
Final semester test	30%	С	55 - <70					
Practice	15%	D	50 - < 55					
Presence	10%	Е	0 - <50					

Appendix 2. Question samples

- 1. a. Why is it also mentioned in determining the meter bar as a standard length?temperature state?
 - b. Can length be called a basic quantity if it depends on other quantities such as temperature for the determination of the standard?
 - c. Count! how many kilometers are there in 20 miles, using only the following conversions:
 - 1 mile = 5280 feet, 1 foot = 12 inches, 1 inch = 2.54 cm, 1 meter = 100 cm and 1 km = 1000 meters. (to echieve CLO 1)
- A leaf with an area of 98 cm2 has a constant temperature around 27 0 C, pressure 76 cm Hg.
 Determine the heat lost from the leaf surface due to convection for 1 hour if the location of the leaf;
 a. vertical
 b. horizontal
 (to echieve CLO 2)

3. The pipe for distributing irrigation water is attached to a wall as shown in the following picture! The ratio of the cross-sectional area of a large pipe (A1) and a small pipe (A2) is 4: 1. The position of the big pipe is 5 m above the ground and the small pipe is 1 m above the ground. The speed of water flow in the large pipe is 36 km/hour with a pressure of 9.1 x 105 Pa. Determine: Velocity of water in small pipe.



(to echieve CLO 3)

- 4. a What is light interference?
 - b What are the conditions for minimum and maximum light interference?
 - c Explain the properties of electromagnetic waves.
 - d. Name and explain the electromagnetic wave spectrum that is useful for agriculture!

(to echieve CLO 4)

Appendix 3. Achievement of CLO A Class

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1-2	89			
3-4		84		
5			80	
6	78			
7-8			78	
9 -10				81
11				81
12				84
13-14				82
Average	83,5	84	79	82
Predicate	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT

B Class

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1-2	86			
3-4		81		
5			79	
6	74			
7-8			75	
9 -10				75
11				75
12				76
13-14				72
Average	80	81	77	74,5
Predicate	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT

C Class

Meetings	CLO 1 (%)	CLO 2 (%)	CLO 3 (%)	CLO 4 (%)
1-2	73			
3-4		70		
5			69	
6	69			
7-8			67	
9 -10				70
11				72
12				70
13-14				70
Average	71	70	68	70,5
Predicate	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT

Standard

Std num-	based AI	Weighted avg LO b	pased AI
>70 = AI	HIGH	>70 = AI	EXCELLENT
60 <= AI < 70	MEDIUM	60 <= AI < 70	SATISFACTORY
50 <= AI < 60	LOW	50 <= AI < 60	DEVELOPING
AI < 50	VERY LOW	AI < 50	UNSATISFACTORY

Appendix 4. Achievement on each per student

A Class

									SUB	-CPM	к/вов	OT (NIL	AI HAF	RIAN)							MILALITA	RIAN (15%	D		LUTE		NILAI A	KHIR **		
NO.	NPM	NAMA		1		2	3	3	4	1		5		6		7		8		9	NILAI HA	IKIAN (15%	Presence	(10%) actice (15 (30%)		actice (15	UTS	UAS (30%)	ANCKA	HURU
				10%		10%		10%		10%		15%		10%		10%		10%		15%	Skala 4	Skala 100	(10%)		(50%)		ANGKA	HUKU		
1	21901031001	WINDI TRI WAHYUNI	4,00	0,40	4,00	0,40	3,00	0,30	4,00	0,40	3,50	0,53	4,00	0,40	4,00	0,40	4,00	0,40	3,00	0,45	3,68	91,88	100	86	80	87	86,78	А		
2	21901031002	VICKY PRADANA PUTRA	4,00	0,40	2,50	0,25	2,00	0,20	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,60	3,10	77,50	100	78	75	72	77,43	В		
3	21901031003	IMAM MULARIF	4,00	0,40	4,00	0,40	4,00	0,40	3,34	0,33	4,00	0,60	2,50	0,25	3,00	0,30	4,00	0,40	4,00	0,60	3,68	92,10	100	79	82	82	84,87	А		
4	21901031004	HAYATUN NUFUS	3,00	0,30	3,00	0,30	4,00	0,40	3,00	0,30	2,50	0,38	3,20	0,32	3,50	0,35	3,00	0,30	3,00	0,45	3,10	77,38	100	88	80	82	83,41	А		
5	21901031005	BAGAS ADITYA SYAHPUTRA	3,00	0,30	3,50	0,35	4,00	0,40	3,00	0,30	2,00	0,30	3,00	0,30	3,00	0,30	3,00	0,30	3,50	0,53	3,08	76,88	94	84	70	67	74,63	В		
6	21901031006	M. NADHIM ARDIANSYAH	3,00	0,30	4,00	0,40	3,00	0,30	3,50	0,35	3,50	0,53	2,00	0,20	3,00	0,30	3,75	0,38	3,40	0,51	3,26	81,50	100	83	68	77	78,18	E		
7	21901031007	IMRA'TULHASANAH	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	3,50	0,35	4,00	0,40	4,00	0,60	3,40	85,00	100	87	85	82	85,90	A		
В	21901031008	ALIFIYAH FIRANDA PUTRI	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,30	3,60	0,54	4,00	0,40	3,00	0,30	3,50	0,35	2,75	0,41	3,35	83,81	100	81	80	87	84,82			
9	21901031009	NADYA VIOLITTA ANANDA	3,00	0,30	3,50	0,35	3,00	0,30	4,00	0,40	2,00	0,30	4,00	0,40	3,00	0,30	3,50	0,35	3,25	0,49	3,19	79,69	100	87	85	82	85,10	4		
0	21901031010	VIVIN HAFIDATUR ROFI'A	3,50	0,35	4,00	0,40	3,50	0,35	3,00	0,30	4,00	0,60	3,00	0,30	3,00	0,30	4,00	0,40	2,75	0,41	3,41	85,31	100	85	75	87	84,15	,		
1	21901031011	BONA SIROIS	3,00	0,30	3,00	0,30	2,00	0,20	3,00	0,30	3,00	0,45	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	2,95	73,75	100	85	70	77	77,91			
2	21901031012	DODIK PRAMUDIA	3,00	0,30	2,50	0,25	2,50	0,25	3,00	0,30	2,50	0,38	2,50	0,25	2,50	0,25	3,00	0,30	2,50	0,38	2,65	00,25	100	80	73	87	79,94			
3	21901031013	ALIFIA WILDA AMALIA PU	4,00	0,40	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,45	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,45	3,10	77,50	94	87	70	72	76,68			
4	21901031014	MOHAMMAD SHOLEHUDDIN	2,00	0,20	2,50	0,25	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,68	66,88	100	80	75	77	77,63			
5	21901031015	VIRA YUNIA H. SANI	3,50	0,35	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,45	4,00	0,40	3,00	0,30	3,50	0,35	3,65	0,55	3,45	86,19	100	81	82	82	84,28			
6	21901031016	MAYADA FONI NURDEA	4,00	0,40	3,00	0,30	4,00	0,40	3,00	0,30	3,50	0,53	3,20	0,32	3,50	0,35	4,00	0,40	3,20	0,48	3,48	86,88	94	87	78	82	83,48			
7	21901031017	DIPO DWITANTO AMIR PUT	4,00	0,40	3,00	0,30	3,50	0,35	3,67	0,37	3,00	0,45	3,00	0,30	4,00	0,40	3,50	0,35	3,75	0,56	3,48	86,99	100	83	70	72	78,10			
8	21901031018	SUCI RAMADHANI	4,00	0,40	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,75	0,38	3,00	0,30	4,00	0,60	3,43	85,63	100	85	80	82	84,19			
9	21901031019	NAVILA FIRDIANI INANDA	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,40	3,50	0,53	3,00	0,30	4,00	0,40	3,50	0,35	3,20	0,48	3,36	83,88	100	86	75	57	75,08			
0	21901031020	ELISA OKTA ARGARENZA	4,00	0,40	3,50	0,35	3,50	0,35	3,00	0,30	4,00	0,60	3,50	0,35	3,25	0,33	4,00	0,40	3,50	0,53	3,60	90,00	100	88	75	81	83,50	,		
21	21901031021	KHOLIFATUL JANNAH	3,50	0,35	4,00	0,40	4,00	0,40	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,60	3,40	85,00	100	85	65	65	74,50			
22	21901031022	MOHAMMAT MAS'UT KHAKIM	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,45	4,00	0,40	3,00	0,30	3,00	0,30	3,75	0,56	3,31	82,81	100	85	70	67	76,27			
23	21901031023	MOCH DIMAS FITROH ROHM	4,00	0,40	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,45	2,75	0,28	3,50	0,35	3,50	0,35	3,50	0,53	3,35	83,75	100	81	75	57	74,31			
24	21901031024	FIRZANAH NAHWAH	4,00	0,40	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	4,00	0,40	3,00	0,30	3,65	0,55	3,40	84,94	100	85	82	78	83,49	,		
25	21901031025	AMUKSA BHIYANG SAETO	3,50	0,35	3,00	0,30	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,88	71,88	100	83	70	70	75,23			
26	21901031026	AMANDA REHA ZAHRAN	3,85	0,39	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,45	4,00	0,40	3,00	0,30	3,00	0,30	3,50	0,53	3,41	85,25	100	85	80	78	82,94	,		
27	21901031027	AINUN NISA PUSPITASARI	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,60	3,50	0,35	2,00	0,20	3,00	0,30	3,00	0,45	3,20	80,00	100	84	80	92	86,20			
18	21901031028	EKO WAHYU WIDIANTO	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	3,03	75,63	100	82	70	67	74,74			
19	21901031029	FAIDDATUN NISA	4,00	0,40	3,25	0,33	3,00	0,30	3,50	0,35	3,00	0,45	3,50	0,35	3,25	0,33	3,50	0,35	3,00	0,45	3,30	82,50	100	85	70	55	72,63			
30	21901031030	HADHARATI MAR'I ROHMIT	4,00	0,40	4,00	0,40	3,75	0,38	3,00	0,30	3,00	0,45	3,00	0,30	3,50	0,35	3,50	0,35	3,00	0,45	3,38	84,38	100	80	77	82	82,36	,		
		Rata-rata	3,56	0,36	3,38	0,34	3,19	0,32	3,13	0,31	3,12	0,47	3,24	0,32	3,23	0,32	3,36	0,34	3,28	0,49	3,27	81,70						Г		
		Konversi Skala 100	89,04	8,90	84,38	8,44	79,79	7,98	78,34	7,83	78,00	11,70	80,96	8,10	80,63	8,06	83,96	8,40	81,96	12,29		% Mahasiswa tidak lulus 0%						0%		
											_												% Mahasis	wa nilai A				50%		
																							% Mahasis	wa nilai B				50%		

			CLO 1	CLO 2	CLO 3	CLO 4
NO	NIM	NAMA	Score	Score	Score	Score
1	21901031001	WINDI TRI WAHYUNI	100,00	100,00	81,25	93,75
2	21901031002	VICKY PRADANA PUTRA	100,00	68,75	62,50	81,25
3	21901031003	IMAM MULARIF	100,00	91,75	100,00	84,38
4	21901031004	HAYATUN NUFUS	75,00	75,00	81,25	79,38
5	21901031005	BAGAS ADITYA SYAHPUTRA	75,00	81,25	75,00	78,13
6	21901031006	M. NADHIM ARDIANSYAH	75,00	93,75	81,25	75,94
7	21901031007	IMRA`TULHASANAH	75,00	81,25	75,00	93,75
8	21901031008	ALIFIYAH FIRANDA PUTRI	100,00	75,00	88,75	82,81
9	21901031009	NADYA VIOLITTA ANANDA	75,00	93,75	62,50	85,94
10	21901031010	VIVIN HAFIDATUR ROFI'A	87,50	87,50	93,75	79,69
11	21901031011	BONA SIROIS	75,00	75,00	62,50	78,13
12	21901031012	DODIK PRAMUDIA	75,00	68,75	62,50	65,63
13	21901031013	ALIFIA WILDA AMALIA PU	100,00	75,00	68,75	78,13
14	21901031014	MOHAMMAD SHOLEHUDDIN	50,00	56,25	75,00	71,88
15	21901031015	VIRA YUNIA H. SANI	87,50	93,75	75,00	88,44
16	21901031016	MAYADA FONI NURDEA	100,00	75,00	93,75	86,88
17	21901031017	DIPO DWITANTO AMIR PUT	100,00	83,38	81,25	89,06
18	21901031018	SUCI RAMADHANI	100,00	87,50	75,00	85,94
19	21901031019	NAVILA FIRDIANI INANDA	75,00	87,50	81,25	85,63
20	21901031020	ELISA OKTA ARGARENZA	100,00	81,25	93,75	89,06
21	21901031021	KHOLIFATUL JANNAH	87,50	87,50	87,50	81,25
22	21901031022	MOHAMMAT MAS`UT KHAKIM	75,00	87,50	75,00	85,94
23	21901031023	MOCH DIMAS FITROH ROHM	100,00	75,00	87,50	82,81
24	21901031024	FIRZANAH NAHWAH	100,00	81,25	75,00	88,44
25	21901031025	AMUKSA BHIYANG SAETO	87,50	62,50	75,00	71,88
26	21901031026	AMANDA REHA ZAHRAN	96,25	93,75	75,00	84,38
27	21901031027	AINUN NISA PUSPITASARI	100,00	75,00	87,50	71,88
28	21901031028	EKO WAHYU WIDIANTO	100,00	75,00	75,00	71,88
29	21901031029	FAIDDATUN NISA	100,00	84,38	75,00	82,81
30	21901031030	HADHARATI MAR`I ROHMIT	100,00	87,50	84,38	81,25

B Class

									5	UB-CPM	к/вов	OT (NIL	AI HAR	IAN)							NIIALUA	RIAN (15%	D		LITE	UAS	NILAI A	KHIR **
NO.	NPM	NAMA	1	1		2		3		4		5		6		7	8	3	9	9	NILAI NA	MIMIN (1570	Presence (10%)	ctice (1	UTS (30%)	(30%)	ANGKA	pur
				10%		10%		10%		10%		15%		10%		10%		10%		15%	Skala 4	Skala 100	(20/0)		(30,0)	(30,0)	ANGKA	HURUF
1	21901031031	NOVAN RIZKI PRATAMA	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,30	3,50	0,53	3,00	0,30	3,00	0,30	4,00	0,40	2,50	0,38	3,10	77,50	100	84	60	75	74,73	В
2	21901031032	AHMAD FIRDAUS	4,00	0,40	2,50	0,25	3,50	0,35	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	3,03	75,63	100	79	65	65	72,19	В
3	21901031033	MUHAMMAD MAHDINOOR	4,00	0,40	3,50	0,35	3,50	0,35	3,00	0,30	3,00	0,45	2,50	0,25	3,00	0,30	3,00	0,30	3,00	0,45	3,15	78,75	100	89	82	77	82,86	Α
4	21901031034	NADYAH BIRRIKIE IFFADA	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,93	73,13	100	85	78	82	81,72	A
_		FUSTHATUL QONITAH	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	2,50	0,25	3,00	0,30	3,00	0,30	3,50	0,53	3,08	76,88	100	88	85	78	83,63	Α
6	21901031037	MEGA AYU KARTIKA	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,30	3,50	0,53	2,50	0,25	3,00	0,30	3,00	0,30	3,00	0,45	3,13	78,13	100	87	84	80	83,97	Α
′	21901031038	FATMI OKTAVIA	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	2,50	0,25	3,00	0,30	2,00	0,30	2,90	72,50	100	83	70	75	76,83	В
8	21901031039	CICI NUR HIDAYATI	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	2,50	0,25	2,75	0,41	3,06	76,56	100	88	70	80	79,68	В
9	21901031040	DESYA ANASTASYA RAMADH	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	2,50	0,25	2,50	0,25	2,50	0,25	2,25	0,34	2,79	69,69	100	88	65	78	70,55	В
10	21901031041	AHMAD DWI FAKHRUDIN ZU	3,00	0,30	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,00	0,30	2,80	70,00	88	79	50	75	68,65	С
11	21901031042	NURMA	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,93	73,13	100	83	75	70	76,92	В
12	21901031043	BINTANG AULIA	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	2,50	0,38	2,50	0,25	3,50	0,35	3,00	0,30	3,50	0,53	3,05	76,25	94	83	70	72	75,89	В
13	21901031044	ALAA NURROHMAN ATAABIK	3,00	0,30	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,88	71,88	100	82	75	80	79,58	В
14	21901031045	ACHMAD YOGA NUR SIFAUD	3,00	0,30	2,50	0,25	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,78	69,38	100	84	05	78	75,91	В
15	21901031046	JAKA ALIEF BAGASKARA	3,50	0,35	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,45	3,50	0,35	3,00	0,30	3,50	0,35	3,65	0,55	3,40	84,94	100	87	80	80	83,79	Α
16	21901031047	ABDULLOH KAFABIHI	3,00	0,30	3,00	0,30	4,00	0,40	3,00	0,30	3,50	0,53	3,20	0,32	3,50	0,35	3,50	0,35	3,20	0,48	3,33	83,13	100	86	60	75	75,87	В
17	21901031048	YOFI SUTANTO	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,45	3,00	0,30	4,00	0,40	2,50	0,25	3,75	0,56	3,31	82,81	100	86	70	60	74,32	В
18	21901031049	MUHAMMAD FAHRI FABIANS	4,00	0,40	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,45	3,15	78,75	100	84	72	67	76,11	В
19	21901031050	AMAL MA'RUF	2,50	0,25	3,00	0,30	3,00	0,30	2,00	0,20	2,50	0,38	3,00	0,30	2,00	0,20	2,50	0,25	2,00	0,30	2,48	61,88	69	0	0	0	16,18	E
20	21901031051	AHMAD TRI SUPRIYANTO	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,45	3,50	0,35	3,25	0,33	4,00	0,40	3,50	0,53	3,40	85,00	100	83	72	68	77,20	В
21	21901031052	DINDA FATIKASARI	3,50	0,35	4,00	0,40	4,00	0,40	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,60	3,40	85,00	100	83	85	80	84,70	Α
22	21901031053	DINDA DARA JOFITA	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	2,00	0,20	2,50	0,38	2,78	69,38	100	87	70	85	79,96	В
23	21901031054	IMTIYAZ KAMILAH NURUL	4,00	0,40	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,45	2,75	0,28	3,50	0,35	3,50	0,35	3,50	0,53	3,35	83,75	100	85	78	85	84,21	A
24	21901031055	MOHAMMAD AGAM YOGASWAR	4,00	0,40	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	3,00	0,30	3,00	0,30	3,65	0,55	3,30	82,44	100	85	67	68	75,62	В
25	21901031056	RAMDAN HARIS	3,50	0,35	3,00	0,30	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,88	71,88	100	81	60	75	73,43	В
26	21901031057	MOH. SHOHIBUL BURHAN	3,85	0,39	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,24	80,88	100	86	70	75	78,53	В
27	21901031058	AGUNG FAUZAN	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	2,00	0,20	3,00	0,30	3,00	0,45	3,05	76,25	100	85	70	75	77,69	В
28	21901031059	WAHYU DIAN PRAMANA	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	3,03	75,63	100	89	76	84	82,69	Α
29	21901031060	ALEK PERDANA PUTRA	4,00	0,40	3,25	0,33	3,00	0,30	3,50	0,35	3,00	0,45	3,50	0,35	3,25	0,33	3,50	0,35	3,00	0,45	3,30	82,50	100	85	73	85	82,53	Α
		Rata-rata	3,44	0,34	3,23	0,32	3,16	0,32	***	0,29	3,02	0,45	3,02	0,30	2,98	0,30	3,03	0,30	2,89	0,43	3,07	76,67						
		Konversi Skala 100	86,08	8,61	80,82	8,08	78,88	7,89	73,71	7,37	75,43	11,31	75,39	7,54	74,57	7,46	75,86	7,59	72,20	10,83			% Mahasisy	wa tidak lu	ulus			3%
									П														% Mahasisy	wa nilai A				31%
\neg							76,29		\Box						П								% Mahasisy	wa nilai B				62%
\neg									\Box						П								% Mahasisy	wa nilai C				3%

			CLO 1	CLO 2	CLO 3	CLO 4
NO	NIM	NAMA	Score	Score	Score	Score
1	21901031031	NOVAN RIZKI PRATAMA	75,00	75,00	81,25	78,13
2	21901031032	AHMAD FIRDAUS	100,00	68,75	81,25	71,88
3	21901031033	MUHAMMAD MAHDINOOR	100,00	81,25	81,25	71,88
4	21901031034	NADYAH BIRRIKIE IFFADA	75,00	75,00	75,00	71,88
5	21901031036	FUSTHATUL QONITAH	75,00	81,25	75,00	75,00
6	21901031037	MEGA AYU KARTIKA	75,00	87,50	81,25	71,88
7	21901031038	FATMI OKTAVIA	75,00	81,25	75,00	68,75
8	21901031039	CICI NUR HIDAYATI	100,00	75,00	81,25	70,31
9	21901031040	DESYA ANASTASYA RAMADH	75,00	81,25	75,00	60,94
10	21901031041	AHMAD DWI FAKHRUDIN ZU	75,00	75,00	68,75	68,75
11	21901031042	NURMA	75,00	75,00	75,00	71,88
12	21901031043	BINTANG AULIA	75,00	81,25	68,75	78,13
13	21901031044	ALAA NURROHMAN ATAABIK	75,00	75,00	68,75	71,88
14	21901031045	ACHMAD YOGA NUR SIFAUD	75,00	56,25	75,00	71,88
15	21901031046	JAKA ALIEF BAGASKARA	87,50	93,75	75,00	85,31
16	21901031047	ABDULLOH KAFABIHI	75,00	75,00	93,75	83,75
17	21901031048	YOFI SUTANTO	100,00	75,00	81,25	82,81
18	21901031049	MUHAMMAD FAHRI FABIANS	100,00	87,50	75,00	71,88
19	21901031050	AMAL MA`RUF	62,50	62,50	68,75	59,38
20	21901031051	AHMAD TRI SUPRIYANTO	100,00	75,00	81,25	89,06
21	21901031052	DINDA FATIKASARI	87,50	87,50	87,50	81,25
22	21901031053	DINDA DARA JOFITA	75,00	68,75	75,00	65,63
23	21901031054	IMTIYAZ KAMILAH NURUL	100,00	75,00	87,50	82,81
24	21901031055	MOHAMMAD AGAM YOGASWAR	100,00	81,25	75,00	82,19
25	21901031056	RAMDAN HARIS	87,50	62,50	75,00	71,88
26	21901031057	MOH. SHOHIBUL BURHAN	96,25	93,75	75,00	75,00
27	21901031058	AGUNG FAUZAN	100,00	75,00	75,00	71,88
28	21901031059	WAHYU DIAN PRAMANA	100,00	75,00	75,00	71,88
29	21901031060	ALEK PERDANA PUTRA	100,00	84,38	75,00	82,81

C Class

	NPM	NAMA		SUB-CPMK/BOBOT (NILAI HARIAN)												NILAI HA	NILAI HARIAN (15% Prese			UTE	as	NILAI AKHIR **						
NO.			1			2 3		3 4		4	5		6		7		8		9	THE STATE OF	HILAI HAMAN (13%		actice (15	UTS (30%)	UAS (30%)			
				10%		10%		10%		10%		15%		10%		10%		10%		15%	Skala 4 Skala 100	e (10%)		(5070)	(50,0)	ANGKA	HURUF	
1	21901031061	MOHAMMAD AGAM AFENDI	4,00	0,40	4,00	0,40	3,00	0,30	4,00	0,40	3,50	0,53	4,00	0,40	4,00	0,40	4,00	0,40	3,00	0,45	3,68	91,88	94	82	75	68	78,38	В
2	21901031062	ANDI AMIRUDIN	2,50	0,25	2,50	0,25	2,00	0,20	3,00	0,30	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	3,00	0,45	2,80	70,00	44	0	0	О	14,90	E
3	21901031063	HAFIZH NAUFALAL MUTAWA	4,00	0,40	3,00	0,30	3,50	0,35	3,34	0,33	3,50	0,53	2,50	0,25	3,00	0,30	3,00	0,30	2,50	0,38	3,13	78,35	88	9	68	68	62,70	С
4	21901031064	PUTRI ARIANI	3,00	0,30	3,00	0,30	4,00	0,40	3,00	0,30	2,50	0,38	3,20	0,32	3,50	0,35	3,00	0,30	3,00	0,45	3,10	77,38	100	84	65	73	75,61	В
5	21901031065	SRI RIZKIATUN	3,00	0,30	3,50	0,35	4,00	0,40	3,00	0,30	2,00	0,30	3,00	0,30	3,00	0,30	3,00	0,30	3,50	0,53	3,08	76,88	100	82	60	73	73,73	В
6	21901031066	MAULIDIAH CHOIRUNNISA'	3,00	0,30	4,00	0,40	3,00	0,30	3,50	0,35	3,50	0,53	2,00	0,20	3,00	0,30	3,75	0,38	3,40	0,51	3,26	81,50	81	44	50	73	63,83	С
7	21901031067	MOCHAMAD NUR NUGROHO	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	3,50	0,35	4,00	0,40	4,00	0,60	3,40	85,00	100	81	70	68	76,30	В
8	21901031068	NICOLA ZAKIA CORDOVA	3,00	0,30	3,00	0,30	3,50	0,35	2,00	0,20	2,50	0,38	3,00	0,30	2,75	0,28	2,50	0,25	2,75	0,41	2,76	69,06	81	59	0	92	54,91	D
9	21901031069	AZIZA RIFKI FIRDAUS	3,00	0,30	3,50	0,35	3,00	0,30	4,00	0,40	2,00	0,30	4,00	0,40	3,00	0,30	3,50	0,35	3,25	0,49	3,19	79,69	100	81	80	0	58,10	С
10	21901031070	RISHA SALSA BILA	3,50	0,35	4,00	0,40	3,50	0,35	3,00	0,30	4,00	0,60	3,00	0,30	3,00	0,30	3,50	0,35	2,75	0,41	3,36	84,06	100	82	70	78	79,31	В
11	21901031071	MUHAMMAD AWALLUDIN	3,00	0,30	3,00	0,30	2,00	0,20	3,00	0,30	3,00	0,45	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	2,95	73,75	100	87	60	73	74,01	В
12	21901031072	MOH TRYAN HIDAYAT	3,00	0,30	2,50	0,25	2,50	0,25	3,00	0,30	2,50	0,38	2,50	0,25	2,50	0,25	3,00	0,30	2,50	0,38	2,05	00,25	94	79	40	68	63,59	С
13	21901031073	IBROHIM KHOLILI	4,00	0,40	3,00	0,30	2,50	0,25	3,00	0,30	3,00	0,45	3,00	0,30	3,50	0,35	3,00	0,30	3,00	0,45	3,10	77,50	100	42	77	75	73,53	В
14	21901031074	FEBRIQA NURJAHRATUL HA	3,00	0,30	2,50	0,25	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,78	69,38	100	78	60	73	72,01	В
15	21901031075	MUHAMMAD NUR WAKHID	2,00	0,20	2,00	0,20	3,00	0,30	3,50	0,35	3,00	0,45	2,00	0,20	3,00	0,30	2,50	0,25	2,50	0,38	2,63	65,63	94	71	0	3	30,79	E
16	21901031076	AHMAD SAYFUDDIN	4,00	0,40	3,00	0,30	4,00	0,40	3,00	0,30	3,50	0,53	3,00	0,30	3,50	0,35	3,00	0,30	3,20	0,48	3,36	83,88	94	80	75	78	79,88	В
17	21901031077	PRISCA AULIYA BANAFSAH	4,00	0,40	3,00	0,30	3,50	0,35	3,67	0,37	3,00	0,45	3,00	0,30	4,00	0,40	3,50	0,35	3,75	0,56	3,48	86,99	100	82	82	80	83,95	A
18	21901031078	FATIMATUZ ZAHRO	4,00	0,40	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	3,75	0,38	3,00	0,30	4,00	0,60	3,43	85,63	100	83	80	81	83,59	Α
19	21901031079	WILUJENG PUTRI JANUART	3,00	0,30	3,00	0,30	3,00	0,30	4,00	0,40	3,50	0,53	3,00	0,30	4,00	0,40	3,50	0,35	3,20	0,48	3,36	83,88	94	81	75	73	78,53	В
20	21901031080	ISMUHADIN SAKIR	2,00	0,20	2,50	0,25	2,50	0,25	3,00	0,30	3,00	0,45	3,50	0,35	3,25	0,33	3,00	0,30	2,50	0,38	2,80	70,00	25	0	0	0	13,00	E
21	21901031081	ILLYAS DHEO KURNIAWAN	2,00	0,20	2,00	0,20	3,00	0,30	3,00	0,30	3,00	0,45	3,00	0,30	2,00	0,20	2,00	0,20	3,00	0,45	2,60	65,00	94	30	0	0	23,65	E
22	21901031082	ISNA KHOFIFAH ASYFA	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,30	3,00	0,45	4,00	0,40	3,00	0,30	3,00	0,30	3,75	0,56	3,31	82,81	100	85	78	81	82,87	A
23	21901031083	DENY KHOIRUL ABDILLAH	4,00	0,40	3,00	0,30	4,00	0,40	3,00	0,30	3,00	0,45	2,75	0,28	3,50	0,35	3,50	0,35	3,50	0,53	3,35	83,75	94	87	70	78	79,41	В
24	21901031084	MOHAMMAD ABDULLAH HASB	4,00	0,40	3,50	0,35	3,00	0,30	3,00	0,30	3,00	0,45	3,50	0,35	4,00	0,40	3,00	0,30	3,65	0,55	3,40	84,94	100	84	83	79	83,94	A
25	21901031085	CINDI OKTAVIANA NURHID	3,50	0,35	3,00	0,30	3,00	0,30	2,00	0,20	3,00	0,45	3,00	0,30	3,00	0,30	3,00	0,30	2,50	0,38	2,88	71,88	100	88	78	О	57,38	С
26	21901031086	SHINTA DWI CAHYA	3,85	0,39	4,00	0,40	3,00	0,30	3,50	0,35	3,00	0,45	4,00	0,40	3,00	0,30	3,00	0,30	3,50	0,53	3,41	85,25	100	86	85	76	83,99	A
27	21901031087	LUIZINHO PIRES FREITAS	3,00	0,30	2,00	0,20	2,00	0,20	2,00	0,20	2,00	0,30	2,50	0,25	2,00	0,20	3,00	0,30	3,00	0,45	2,40	60,00	69	0	0	О	15,90	E
		Rata-rata	2,91	0,29	2,80	0,28	2,75	0,28	2,75	0,28	2,67	0,40	***	0,28	2,86	0,29	2,81	0,28	2,81	0,42	2,79	69,68						
		Konversi Skala 100	72,79	7,28	70,00	7,00	68,75	6,88	68,76	6,88	00,07	10,00	69,54	6,95	71,46	7,15	70,21	7,02	70,17	10,53								
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			CLO 1	CLO 2	CLO 3	CLO 4
NO	NIM	NAMA	Score	Score	Score	Score
1	21901031061	MOHAMMAD AGAM AFENDI	100,00	100,00	81,25	93,75
2	21901031062	ANDI AMIRUDIN	62,50	68,75	62,50	75,00
3	21901031063	HAFIZH NAUFALAL MUTAWA	100,00	79,25	87,50	68,75
4	21901031064	PUTRI ARIANI	75,00	75,00	81,25	79,38
5	21901031065	SRI RIZKIATUN	75,00	81,25	75,00	78,13
6	21901031066	MAULIDIAH CHOIRUNNISA`	75,00	93,75	81,25	75,94
7	21901031067	MOCHAMAD NUR NUGROHO	75,00	81,25	75,00	93,75
8	21901031068	NICOLA ZAKIA CORDOVA	75,00	62,50	75,00	68,75
9	21901031069	AZIZA RIFKI FIRDAUS	75,00	93,75	62,50	85,94
10	21901031070	RISHA SALSA BILA	87,50	87,50	93,75	76,56
11	21901031071	MUHAMMAD AWALLUDIN	75,00	75,00	62,50	78,13
12	21901031072	MOH TRYAN HIDAYAT	75,00	68,75	62,50	65,63
13	21901031073	IBROHIM KHOLILI	100,00	75,00	68,75	78,13
14	21901031074	FEBRIQA NURJAHRATUL HA	75,00	56,25	75,00	71,88
15	21901031075	MUHAMMAD NUR WAKHID	50,00	68,75	75,00	62,50
16	21901031076	AHMAD SAYFUDDIN	100,00	75,00	93,75	79,38
17	21901031077	PRISCA AULIYA BANAFSAH	100,00	83,38	81,25	89,06
18	21901031078	FATIMATUZ ZAHRO	100,00	87,50	75,00	85,94
19	21901031079	WILUJENG PUTRI JANUART	75,00	87,50	81,25	85,63
20	21901031080	ISMUHADIN SAKIR	50,00	68,75	68,75	76,56
21	21901031081	ILLYAS DHEO KURNIAWAN	50,00	62,50	75,00	62,50
22	21901031082	ISNA KHOFIFAH ASYFA	75,00	87,50	75,00	85,94
23	21901031083	DENY KHOIRUL ABDILLAH	100,00	75,00	87,50	82,81
24	21901031084	MOHAMMAD ABDULLAH HASB	100,00	81,25	75,00	88,44
25	21901031085	CINDI OKTAVIANA NURHID	87,50	62,50	75,00	71,88
26	21901031086	SHINTA DWI CAHYA	96,25	93,75	75,00	84,38
27	21901031087	LUIZINHO PIRES FREITAS	75,00	50,00	50,00	65,63