

**MODULE PORTFOLIO**  
**ODD SEMESTER ACADEMIC YEAR 2019/2020**

MODULE NAME	:	Contextual Mathematics	LECTURER:
MODULE CODE	:		Rooselyna Ekawati, Ph.D Ahmad Wachidul Kohar, M.Pd
CLASS	:	2018	
SEMESTER	:	3	
DATE	:	27 Januari 2020	
COURSE LEARNING OUTCOMES	:	<p><b>Programme Learning Outcomes (PLO)</b></p> <p><b>KNO-2</b> Able to demonstrate pedagogical knowledge in designing, implementing and evaluating Mathematics' learning</p> <p><b>SKI-1</b> Able to design, implement and evaluate mathematics' teaching and learning by using ICT problems</p> <p><b>COM-1</b> Able to communicate idea and research result effectively orally and literally.</p> <p><b>COM-2</b> Able to make decision based on data/information in solving task that become students' responsibility and evaluate the work that has been done.</p> <p><b>SOC-1</b> Able to demonstrate scientific attitude, critical and innovative in mathematics teaching and learning and professional task.</p> <p><b>CLO-1</b> able to explain the principle and characteristics of Realistic Mathematics with the types of context and its application within learning process</p> <p><b>CLO-2</b> able to explain the hypothetical learning trajectory with Realistic Mathematics Education approach</p> <p><b>CLO-3</b> able to design hypothetical learning trajectory and evaluate mathematics learning with Realistic Mathematics Education approach in primary and secondary level through presentation with IT</p> <p><b>CLO-4</b> able to communicate ideas and research result about Realistic Mathematics from scientific resources by written and oral effectively</p> <p><b>CLO-5</b> able to determine types of context related to real life related to number, algebra, measurement and geometry, probability and statistics, calculus and combinatoric with its application in mathematics learning at primary and secondary school.</p> <p><b>CLO-6</b> able to criticize the developed mathematics learning with realistics mathematics approach based on its principle and characteristics</p>	

**Correlation Between PLO and CLO Contextual Mathematics**

<b>Contextual Mathematics</b>	<b>KNO-2</b>	<b>SKI-1</b>	<b>COM-1</b>	<b>COM-2</b>	<b>SOC-1</b>
CLO-1	√				
CLO-2	√				
CLO-3		√			
CLO-4			√		
CLO-5				√	
CLO-6					√

**LEARNING STRATEGIES**

: This course was done by activating students with several strategies such as ekspository, discussion, presentation and group project

**ASSESSMENT**

Assessment contains three components such as:

1. Task
2. Mid Test
3. Final Test

**1. Task**

- ✓ The task was given two times in a semester, before mid test (in take home task) and after mid Test (in the presentation form)
- ✓ Presentation was held after mid Test which consider as group task
- ✓ Every group presents hypothetical learning trajectory and worksheet with realistics mathematics approach with one specific topic.
- ✓ The assesment for Task was done to observe the achievement of program learning outcome and course learning outcome that

suit with the course of Contextual Mathematics

**2. Mid Test**

- √ Mid-Test held in 8th meeting
- √ Mid-Test was held in a classroom with its time of implementation 100 minutes and scheduled as the course schedule
- √ The Mid-Test was done to observe the achievement of program learning outcome and course learning outcome that suit with the course of Contextual Mathematics

**3. Final Test**

- √ Final Test was held after 15th meeting
- √ Final Test was held in 16th meeting
- √ Final Test was done by submitting group project and follow the schedule of Final Test from Mathematics Department
- √ The Final T was done to observe the achievement of program learning outcome and course learning outcome that suit with the course of Contextual Mathematics

**Assessmen Plan**

Contextual Mathematics	KNO-2	SKI-1	COM-1	COM-2	SOC-1
CLO-1	√				
CLO-2	√				
CLO-3		√			
CLO-4			√		
CLO-5				√	
CLO-6					√

**Weight of Test Ability**

Contextual Mathematics	KNO-2	SKI-1	COM-1	COM-2	SOC-1
------------------------	-------	-------	-------	-------	-------

Tugas	20%	40%	20%		20%
UTS	40%	60%			
UAS		20%	40%	40%	

**The Calculation of PLO's Weight**

	T	UTS	UAS	
<b>KNO-2</b>	0.2	0.4		<b>0.6</b>
<b>SKI-1</b>	0.4	0.6	0.2	<b>1.2</b>
<b>COM-1</b>	0.2		0.4	<b>0.6</b>
<b>COM-2</b>			0.4	<b>0.4</b>
<b>SOC-1</b>	0.2			<b>0.2</b>
	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>

LEARNING  
OUTCOMES

**The Calculation of PLO for each students**

NO	NIM					
		KNO-2	SKI-1	COM-1	COM-2	SOC-1
1	16030174006	82.57	84.20	88.00	87.00	90.00
2	16030174054	65.29	71.20	85.00	84.00	87.00
3	17030174011	94.57	92.20	86.67	85.00	90.00
4	17030174032	81.14	83.60	89.33	90.00	88.00
5	18030174001	80.29	81.40	84.00	83.00	86.00
6	18030174002	90.86	90.80	90.67	90.00	92.00
7	18030174004	94.00	92.20	88.00	87.00	90.00

8	18030174006	91.71	89.40	84.00	83.00	86.00
9	18030174008	86.00	86.80	88.67	88.00	90.00
10	18030174012	85.43	85.80	86.67	85.00	90.00
11	18030174015	92.57	90.80	86.67	86.00	88.00
12	18030174016	82.57	84.40	88.67	88.00	90.00
13	18030174018	78.29	82.20	91.33	93.00	88.00
14	18030174019	77.43	80.20	86.67	85.00	90.00
15	18030174020	92.57	92.00	90.67	90.00	92.00
16	18030174021	82.00	84.60	90.67	91.00	90.00
17	18030174034	93.71	92.80	90.67	90.00	92.00
18	18030174035	87.29	88.20	90.33	91.00	89.00
19	18030174036	81.00	83.00	87.67	87.00	89.00
20	18030174037	81.00	83.80	90.33	91.00	89.00
21	18030174038	82.57	85.00	90.67	91.00	90.00
22	18030174040	94.29	92.80	89.33	88.00	92.00
23	18030174041	87.43	88.00	89.33	90.00	88.00
24	18030174044	92.00	91.20	89.33	90.00	88.00
25	18030174045	94.00	92.40	88.67	88.00	90.00
26	18030174046	80.57	83.20	89.33	88.00	92.00
27	18030174047	77.29	79.60	85.00	84.00	87.00
28	18030174068	81.43	84.20	90.67	91.00	90.00
29	18030174069	84.00	86.20	91.33	93.00	88.00
30	18030174070	93.71	92.40	89.33	88.00	92.00
31	18030174071	89.29	88.00	85.00	84.00	87.00
32	18030174072	79.71	82.20	88.00	87.00	90.00
33	18030174073	85.57	86.20	87.67	87.00	89.00
34	18030174075	83.43	84.40	86.67	86.00	88.00
35	18030174078	90.86	89.60	86.67	86.00	88.00

36	18030174079	78.71	82.20	90.33	91.00	89.00
37	18030174082	83.86	85.00	87.67	87.00	89.00
38	18030174083	86.29	87.80	91.33	93.00	88.00
39	15030174087	69.29	71.00	75.00	75.00	75.00
40	16030174004	67.86	66.00	61.67	60.00	65.00
41	16030174013	60.71	67.00	81.67	85.00	75.00
42	17030174054	93.57	90.00	81.67	80.00	85.00
43	18030174022	70.57	73.20	79.33	80.00	78.00
44	18030174024	66.43	67.00	68.33	65.00	75.00
45	18030174025	75.00	77.00	81.67	85.00	75.00
46	18030174026	72.14	70.00	65.00	60.00	75.00
47	18030174027	75.00	77.00	81.67	85.00	75.00
48	18030174028	69.29	72.00	78.33	80.00	75.00
49	18030174030	60.71	62.00	65.00	60.00	75.00
50	18030174031	66.43	69.00	75.00	75.00	75.00
51	18030174032	77.86	76.00	71.67	70.00	75.00
52	18030174033	62.00	65.20	72.67	70.00	78.00
53	18030174048	70.00	73.00	80.00	75.00	90.00
54	18030174050	74.29	77.00	83.33	85.00	80.00
55	18030174051	58.57	61.00	66.67	65.00	70.00
56	18030174052	77.00	76.20	74.33	75.00	73.00
57	18030174055	72.14	76.00	85.00	90.00	75.00
58	18030174057	74.14	76.20	81.00	85.00	73.00
59	18030174058	63.57	69.00	81.67	85.00	75.00
60	18030174059	64.86	66.20	69.33	65.00	78.00
61	18030174060	64.86	67.20	72.67	70.00	78.00
62	18030174061	72.14	73.00	75.00	75.00	75.00
63	18030174064	77.86	80.00	85.00	90.00	75.00

64	18030174065	93.57	90.00	81.67	80.00	85.00
65	18030174067	60.71	66.00	78.33	80.00	75.00
66	18030174084	66.43	67.00	68.33	65.00	75.00
67	18030174085	62.86	66.00	73.33	70.00	80.00
68	18030174087	60.71	63.00	68.33	65.00	75.00
69	18030174089	68.57	68.00	66.67	60.00	80.00
70	18030174090	75.00	75.00	75.00	75.00	75.00
71	18030174093	75.00	73.00	68.33	65.00	75.00
72	18030174096	76.29	79.20	86.00	90.00	78.00
73	18030174097	77.86	77.00	75.00	75.00	75.00
74	18030174098	75.00	74.00	71.67	70.00	75.00
75	18030174100	64.86	67.20	72.67	70.00	78.00
76	17030174060	76.43	78.40	83.00	82.00	85.00
77	18030174003	93.71	90.80	84.00	82.00	88.00
78	18030174007	87.86	86.00	81.67	80.00	85.00
79	18030174009	93.57	89.60	80.33	78.00	85.00
80	18030174010	93.57	90.80	84.33	84.00	85.00
81	18030174013	83.86	83.20	81.67	80.00	85.00
82	18030174017	92.29	89.60	83.33	84.00	82.00
83	18030174029	65.00	70.40	83.00	82.00	85.00
84	18030174042	78.00	79.20	82.00	82.00	82.00
85	18030174043	79.14	80.00	82.00	82.00	82.00
86	18030174054	86.57	85.20	82.00	82.00	82.00
87	18030174056	75.14	76.80	80.67	80.00	82.00
88	18030174062	92.29	89.20	82.00	82.00	82.00
89	18030174066	75.14	76.80	80.67	80.00	82.00
90	18030174074	93.57	90.00	81.67	80.00	85.00
91	18030174076	82.14	81.60	80.33	78.00	85.00

92	18030174077	75.14	76.40	79.33	78.00	82.00
93	18030174081	94.86	90.40	80.00	76.00	88.00
94	18030174086	91.29	87.60	79.00	76.00	85.00
95	18030174088	76.43	78.40	83.00	82.00	85.00
96	18030174091	88.29	85.60	79.33	78.00	82.00
97	18030174092	93.57	89.20	79.00	76.00	85.00
98	18030174094	89.14	86.40	80.00	76.00	88.00
99	18030174095	85.43	83.60	79.33	78.00	82.00
100	18030174099	77.71	79.60	84.00	82.00	88.00
101	18030174101	94.86	91.60	84.00	82.00	88.00

**The predicate of PLO for each student**

NO	NIM					
		KNO-2	SKI-1	COM-1	COM-2	SOC-1
1	16030174006	E	E	E	E	E
2	16030174054	S	G	E	E	E
3	17030174011	E	E	E	E	E
4	17030174032	E	E	E	E	E
5	18030174001	E	E	E	E	E
6	18030174002	E	E	E	E	E
7	18030174004	E	E	E	E	E
8	18030174006	E	E	E	E	E
9	18030174008	E	E	E	E	E
10	18030174012	E	E	E	E	E
11	18030174015	E	E	E	E	E
12	18030174016	E	E	E	E	E



13	18030174018	G	E	E	E	E
14	18030174019	G	E	E	E	E
15	18030174020	E	E	E	E	E
16	18030174021	E	E	E	E	E
17	18030174034	E	E	E	E	E
18	18030174035	E	E	E	E	E
19	18030174036	E	E	E	E	E
20	18030174037	E	E	E	E	E
21	18030174038	E	E	E	E	E
22	18030174040	E	E	E	E	E
23	18030174041	E	E	E	E	E
24	18030174044	E	E	E	E	E
25	18030174045	E	E	E	E	E
26	18030174046	E	E	E	E	E
27	18030174047	G	G	E	E	E
28	18030174068	E	E	E	E	E
29	18030174069	E	E	E	E	E
30	18030174070	E	E	E	E	E
31	18030174071	E	E	E	E	E
32	18030174072	G	E	E	E	E
33	18030174073	E	E	E	E	E
34	18030174075	E	E	E	E	E
35	18030174078	E	E	E	E	E
36	18030174079	G	E	E	E	E
37	18030174082	E	E	E	E	E
38	18030174083	E	E	E	E	E
39	15030174087	S	G	G	G	G
40	16030174004	S	S	S	S	S

41	16030174013	S	S	E	E	G
42	17030174054	E	E	E	E	E
43	18030174022	G	G	G	E	G
44	18030174024	S	S	S	S	G
45	18030174025	G	G	E	E	G
46	18030174026	G	G	S	S	G
47	18030174027	G	G	E	E	G
48	18030174028	S	G	G	E	G
49	18030174030	S	S	S	S	G
50	18030174031	S	S	G	G	G
51	18030174032	G	G	G	G	G
52	18030174033	S	S	G	G	G
53	18030174048	G	G	E	G	E
54	18030174050	G	G	E	E	E
55	18030174051	S	S	S	S	G
56	18030174052	G	G	G	G	G
57	18030174055	G	G	E	E	G
58	18030174057	G	G	E	E	G
59	18030174058	S	S	E	E	G
60	18030174059	S	S	S	S	G
61	18030174060	S	S	G	G	G
62	18030174061	G	G	G	G	G
63	18030174064	G	E	E	E	G
64	18030174065	E	E	E	E	E
65	18030174067	S	S	G	E	G
66	18030174084	S	S	S	S	G
67	18030174085	S	S	G	G	E
68	18030174087	S	S	S	S	G

69	18030174089	S	S	S	S	E
70	18030174090	G	G	G	G	G
71	18030174093	G	G	S	S	G
72	18030174096	G	G	E	E	G
73	18030174097	G	G	G	G	G
74	18030174098	G	G	G	G	G
75	18030174100	S	S	G	G	G
76	17030174060	G	G	E	E	E
77	18030174003	E	E	E	E	E
78	18030174007	E	E	E	E	E
79	18030174009	E	E	E	G	E
80	18030174010	E	E	E	E	E
81	18030174013	E	E	E	E	E
82	18030174017	E	E	E	E	E
83	18030174029	S	G	E	E	E
84	18030174042	G	G	E	E	E
85	18030174043	G	E	E	E	E
86	18030174054	E	E	E	E	E
87	18030174056	G	G	E	E	E
88	18030174062	E	E	E	E	E
89	18030174066	G	G	E	E	E
90	18030174074	E	E	E	E	E
91	18030174076	E	E	E	G	E
92	18030174077	G	G	G	G	E
93	18030174081	E	E	E	G	E
94	18030174086	E	E	G	G	E
95	18030174088	G	G	E	E	E
96	18030174091	E	E	G	G	E

97	18030174092	E	E	G	G	E
98	18030174094	E	E	E	G	E
99	18030174095	E	E	G	G	E
100	18030174099	G	G	E	E	E
101	18030174101	E	E	E	E	E

E = Excellent  
G = Good  
S = Satisfy  
F = Fail

LEARNING  
OUTCOMES  
ANALYSIS

PLO Assessment Rubric

PLO	Description	Excellent	Good	Satisfy	Fail
<b>KNO-2</b>	Able to demonstrate pedagogical knowledge in designing, implementing and evaluating Mathematics' learning	Students be able to determine the characteristics and principle of Realistic Mathematics Education within situational problems with score at least 80.	Students be able to determine the characteristics and principle of Realistic Mathematics Education within situational problems with score at least 70 and less than 80.	Students be able to determine the characteristics and principle of Realistic Mathematics Education within situational problems with score at least 55 and less than 70.	Students be able to determine the characteristics and principle of Realistic Mathematics Education within situational problems with score less than 55.
<b>SKI-1</b>	Able to design, implement and evaluate mathematics' teaching and learning by using ICT	able to design, model and evaluate the learning trajectory with Realistic Mathematics Education approach	able to design, model and evaluate the learning trajectory with Realistic Mathematics Education approach with score at least 70 and less than 80..	able to design, model and evaluate the learning trajectory with Realistic Mathematics Education approach with score at least 55 and less than 70	able to design, model and evaluate the learning trajectory with Realistic Mathematics Education approach with score less than 55.

			with score at least 80.			
	<b>COM-1</b>	Able to communicate the idea and research result effectively orally and literally.	Able to communicate an analysis for hypothetical learning trajectory from scientific reference with score at least 80	Able to communicate an analysis for hypothetical learning trajectory from scientific reference with score at least 70 and less than 80	Able to communicate an analysis for hypothetical learning trajectory from scientific reference with score at least 55 and less than 70	Able to communicate an analysis for hypothetical learning trajectory from scientific reference with score less than 55
	<b>COM-2</b>	Able to make decision based on data/information in solving task that become students' responsibility and evaluate the work that has been done.	Able to make decision on the learning trajectory of specific mathematics topics and situation with score at least 80	Able to make decision on the learning trajectory of specific mathematics topics and situation with score at least 70 and less than 80	Able to make decision on the learning trajectory of specific mathematics topics and situation with score at least 55 and less than 70	Able to make decision on the learning trajectory of specific mathematics topics and situation with score less than 55
	<b>SOC-1</b>	Able to demonstrate scientific attitude, critical and innovative in mathematics teaching and learning and	Able to criticize the given task within textbook related to context as well its used in mathematics teaching with score at least 80	Able to criticize the given task within textbook related to context as well its used in mathematics teaching with score at least 70 and less than 80	Able to criticize the given task within textbook related to context as well its used in mathematics teaching with score at least 55 and less than 70	Able to criticize the given task within textbook related to context as well its used in mathematics teaching with score less than 55

professional task.

**CLASSICAL VALUE OF PLO**

	KNO-2	SKI-1	COM-1	COM-2	SOC-1
<b>Max</b>	94.86	92.80	91.33	93.00	92.00
<b>Rat</b>	79.93	80.49	81.77	81.02	83.27
<b>Min</b>	58.57	61.00	61.67	60.00	65.00

**ACHIEVEMENT NUMBER OF PLO**

<b>E</b>	51.00	57.00	71.00	69.00	70.00
<b>G</b>	30.00	28.00	20.00	22.00	30.00
<b>S</b>	20.00	16.00	10.00	10.00	1.00
<b>F</b>	0.00	0.00	0.00	0.00	0.00
	0.00	101.00	0.00	101.00	0.00
	101.00	0.00	101.00	0.00	101.00
	0.00	101.00	0.00	101.00	0.00

**ACHIEVEMENT PERCENTAGE OF PLO (%)**

<b>E</b>	50.50	56.44	70.30	68.32	69.31
<b>G</b>	29.70	27.72	19.80	21.78	29.70
<b>S</b>	19.80	15.84	9.90	9.90	0.99
<b>F</b>	0.00	0.00	0.00	0.00	0.00
	0.00	100.00	0.00	100.00	0.00
	100.00	0.00	100.00	0.00	100.00
	0.00	100.00	0.00	100.00	0.00

	<h3 style="text-align: center;">ACHIEVEMENT PERCENTAGE OF PLO</h3> <table border="1"> <caption>ACHIEVEMENT PERCENTAGE OF PLO</caption> <thead> <tr> <th>PLO</th> <th>E</th> <th>G</th> <th>S</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>KNO-1</td> <td>50.00</td> <td>30.00</td> <td>20.00</td> <td>0.00</td> </tr> <tr> <td>KNO-2</td> <td>56.00</td> <td>28.00</td> <td>16.00</td> <td>0.00</td> </tr> <tr> <td>KNO-3</td> <td>70.00</td> <td>20.00</td> <td>10.00</td> <td>0.00</td> </tr> <tr> <td>SKI-1</td> <td>68.00</td> <td>22.00</td> <td>10.00</td> <td>0.00</td> </tr> <tr> <td>SKI-2</td> <td>69.00</td> <td>30.00</td> <td>1.00</td> <td>0.00</td> </tr> <tr> <td>COM-1</td> <td>70.00</td> <td>20.00</td> <td>10.00</td> <td>0.00</td> </tr> <tr> <td>COM-2</td> <td>68.00</td> <td>22.00</td> <td>10.00</td> <td>0.00</td> </tr> <tr> <td>COM-3</td> <td>69.00</td> <td>30.00</td> <td>1.00</td> <td>0.00</td> </tr> <tr> <td>SOC-1</td> <td>69.00</td> <td>30.00</td> <td>1.00</td> <td>0.00</td> </tr> <tr> <td>SOC-2</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> </tbody> </table>	PLO	E	G	S	F	KNO-1	50.00	30.00	20.00	0.00	KNO-2	56.00	28.00	16.00	0.00	KNO-3	70.00	20.00	10.00	0.00	SKI-1	68.00	22.00	10.00	0.00	SKI-2	69.00	30.00	1.00	0.00	COM-1	70.00	20.00	10.00	0.00	COM-2	68.00	22.00	10.00	0.00	COM-3	69.00	30.00	1.00	0.00	SOC-1	69.00	30.00	1.00	0.00	SOC-2	0.00	0.00	0.00	0.00	<h3 style="text-align: center;">CLASSICAL VALUE OF PLO</h3> <table border="1"> <caption>CLASSICAL VALUE OF PLO</caption> <thead> <tr> <th>PLO</th> <th>Max</th> <th>Rat</th> <th>Min</th> </tr> </thead> <tbody> <tr> <td>KNO-1</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>KNO-2</td> <td>80.00</td> <td>65.00</td> <td>48.00</td> </tr> <tr> <td>KNO-3</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>SKI-1</td> <td>35.00</td> <td>30.00</td> <td>25.00</td> </tr> <tr> <td>SKI-2</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>COM-1</td> <td>5.00</td> <td>5.00</td> <td>10.00</td> </tr> <tr> <td>COM-2</td> <td>5.00</td> <td>10.00</td> <td>15.00</td> </tr> <tr> <td>COM-3</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>SOC-1</td> <td>35.00</td> <td>30.00</td> <td>25.00</td> </tr> <tr> <td>SOC-2</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> </tbody> </table>	PLO	Max	Rat	Min	KNO-1	0.00	0.00	0.00	KNO-2	80.00	65.00	48.00	KNO-3	0.00	0.00	0.00	SKI-1	35.00	30.00	25.00	SKI-2	0.00	0.00	0.00	COM-1	5.00	5.00	10.00	COM-2	5.00	10.00	15.00	COM-3	0.00	0.00	0.00	SOC-1	35.00	30.00	25.00	SOC-2	0.00	0.00	0.00
PLO	E	G	S	F																																																																																																	
KNO-1	50.00	30.00	20.00	0.00																																																																																																	
KNO-2	56.00	28.00	16.00	0.00																																																																																																	
KNO-3	70.00	20.00	10.00	0.00																																																																																																	
SKI-1	68.00	22.00	10.00	0.00																																																																																																	
SKI-2	69.00	30.00	1.00	0.00																																																																																																	
COM-1	70.00	20.00	10.00	0.00																																																																																																	
COM-2	68.00	22.00	10.00	0.00																																																																																																	
COM-3	69.00	30.00	1.00	0.00																																																																																																	
SOC-1	69.00	30.00	1.00	0.00																																																																																																	
SOC-2	0.00	0.00	0.00	0.00																																																																																																	
PLO	Max	Rat	Min																																																																																																		
KNO-1	0.00	0.00	0.00																																																																																																		
KNO-2	80.00	65.00	48.00																																																																																																		
KNO-3	0.00	0.00	0.00																																																																																																		
SKI-1	35.00	30.00	25.00																																																																																																		
SKI-2	0.00	0.00	0.00																																																																																																		
COM-1	5.00	5.00	10.00																																																																																																		
COM-2	5.00	10.00	15.00																																																																																																		
COM-3	0.00	0.00	0.00																																																																																																		
SOC-1	35.00	30.00	25.00																																																																																																		
SOC-2	0.00	0.00	0.00																																																																																																		
<b>STUDENT'S LEARNING PERFORMANCE ANALYSIS</b>	<p>From 101 students who follow this course, there are above 50% students fulfill the excellent criteria for all PLO such as KNO-2, SKI-1, COM-1, COM-2, SOC-1. No one consider as fail. However, it is still found that several students are in satisfied categories. The most percentage in the satisfied categories is in KNO-2. Students found difficulties in contextualize the principle and characteristics of Realistic Mathematics Education in mathematics teaching and learning. This difficulties is caused by the limit on the number of meeting for discussing those things. Furthermore, there is a gap between each class performance.</p>																																																																																																				

RECOMMENDATION FOR FUTURE LEARNING	:	<p>There are several recommendation for better course in the future</p> <ol style="list-style-type: none"> <li>1. Motivate students to understand the principle and characteristics of Realistic Mathematics Education with some strategies and make sure every students communicate their understanding with their peers every time</li> <li>2. There is a need for more restricted rules for students who re take this course in the same class as they are.</li> </ol>
RECOMMEDATION FOR INSTITUTION	:	<p>Recommendation for institution is by giving more chance for lecturer to develop more online learning materials for students to learn independently.</p>





**UJIAN TENGAH SEMESTER GASAL  
TAHUN 2019/2020**

Mata Kuliah : Matematika Kontekstual  
Dosen : Roselnya Ekawati, Ph.D  
Ahmad Wachidul Kohar, M.Pd.  
Kelas : Pendidikan Matematika / 2018A  
Hari, Tanggal : Kamis, 10 Oktober 2019  
Waktu : 100 menit  
Tipe : Tertutup

Jawablah semua soal berikut ini dengan menyertakan uraian yang jelas.

1. Perhatikan ilustrasi berikut ini

	<p>"Pak Dilan mengembangkan desain pembelajaran volume balok dan kubus dengan ilustrasi berikut. Ia memperkenalkan materi volume balok dan kubus dengan membawa kardus berukuran 60 cm x 50 cm x 20 cm dan 6 kotak kue kecil, yaitu 20 cm x 15 cm x 10 cm. Lalu, ia membentuk kelompok yang terdiri dari 3 siswa, kemudian meminta siswa untuk mendiskusikan jumlah kotak kue yang diperlukan agar kotak kardus tersebut penuh dengan kotak kue tersebut. Setelah bekerja dalam kelompok, Pak Dilan mengadakan diskusi kelas untuk mendiskusikan bagaimana banyak kotak kue yang dibutuhkan lagi. Pada akhirnya, Pak Dilan membawa hasil diskusi tersebut ke dalam konsep volume kubus dan balok, di mana itu dapat ditemukan dengan mengalikan ukuran panjang, lebar dan tinggi balok atau kubus."</p>
<p>Sekelompok siswa mempresentasikan cara menentukan banyak kota</p>	

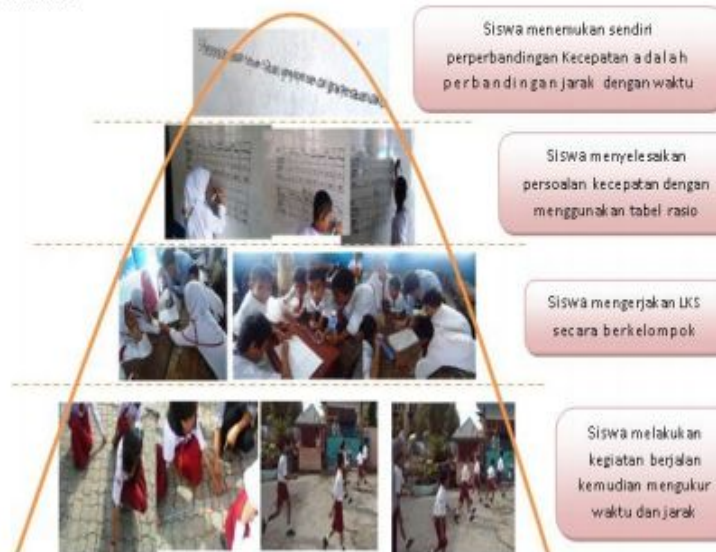
Jelaskan lima karakteristik Pendidikan Matematika Realistik (PMR) yang diilustrasikan dalam desain pembelajaran di atas

2. a. Berikut ini adalah informasi tentang Suroboyo Bus: desain tempat duduk bus dan bagaimana cara mendapatkan tiket.

<p><b>TAUKAH? KAMU?</b></p> <p><b>SEKELUAS BUS</b> Mampu diduduki oleh 20 penumpang</p> <p><b>SEKELUAS PERKOTA</b> Mampu diduduki oleh 10 penumpang</p> <p><b>SEKELUAS JALAN</b> Mampu diduduki oleh 5 penumpang</p> <p><b>INFO</b> Untuk kapasitas penumpang maksimum bus di tingkat maksimumnya 22 penumpang penumpang, 22 penumpang untuk bus, 22 penumpang untuk bus, 22 penumpang untuk bus.</p>	<p><b>BUAT NAIK SUROBOYO BUS</b></p> <p>3 BOTOL BESAR = 1 tiket bus</p> <p>5 BOTOL MEDIAN = 1 tiket bus</p> <p>10 BOTOL PLASTIK = 1 tiket bus</p> <p>Buatlah tiga soal matematika kontekstual yang berbeda, masing-masing memiliki level konteks zero-order, first-order and second-order of context use berdasarkan informasi di atas. a</p>
---	---



- b. Dengan menggunakan soal matematika kontekstual tipe *second-order use of context* yang Anda susun di soal 2a, desainlah sebuah **urutan pembelajaran** yang dapat digunakan untuk mengajarkan topik matematika tertentu di tingkat sekolah menengah pertama.
3. *Ice berg* berikut menggambarkan pembelajaran tentang hubungan kecepatan, jarak, dan waktu di tingkat sekolah dasar.



Jelaskan **tiga prinsip** Pendidikan Matematika Realistik yang diilustrasikan dalam *iceberg* di atas.



**UJIAN AKHIR SEMESTER GASAL  
 TAHUN 2019/2020**

Mata Kuliah : Matematika Kontekstual  
 Dosen : Rooselyna Ekawati, Ph.D  
 Prof. Dr. Siti M Amin, M.Pd.  
 Ahmad Wachidul Kohar, M.Pd.  
 Kelas : Pendidikan Matematika / 2018U/A/C  
 Hari, Tanggal : Kamis, 26 Desember 2019  
 Waktu : 100 menit  
 Tipe : Tertutup

**Jawablah semua soal berikut ini dengan menyertakan uraian yang jelas.**

1. Pilihlah sebuah materi/topik dalam matematika di sekolah dasar atau menengah, lalu berikan analisis tentang kajian lintasan belajar dari referensi buku atau artikel jurnal ilmiah pada topik tersebut.
2. Susunlah sebuah lintasan belajar yang bercirikan pembelajaran matematika realistik pada topik yang telah Anda pilih. Berikan desain lintasan belajar Anda dengan menggunakan format sebagai berikut.

Topik matematika : .....

No	Tujuan matematika	Aktivitas siswa	Deskripsi Aktivitas
1			
2			
3			
4			
5			

3. Susunlah Lembar Kerja Peserta Didik (LKPD) untuk masing-masing langkah pembelajaran pada lintasan belajar yang telah Anda susun dengan memperhatikan pemilihan konteks yang dapat digunakan siswa untuk melakukan matematisasi horizontal dan matematisasi vertikal.
4. Tuliskan lintasan belajar dan LKPD Anda dalam bentuk file untuk diunggah dalam vivesa (elearning Unesa) untuk kemudian didiskusikan dalam media e-learning tersebut dengan dosen dan teman sejawat