



**Universitas Negeri Surabaya**  
**Faculty of Mathematics and Natural Sciences**  
**Bachelor of Mathematics Education Study Program**

Document Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>		
Contextual Mathematics	8420202110		T=2 P=0 ECTS=3.18	3	July 18, 2024		
<b>AUTHORIZATION</b>		<b>SP Developer</b>	<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>			
		.....	.....	Dr. Endah Budi Rahaju, M.Pd.			
<b>Learning model</b>	Case Studies						
<b>Program Learning Outcomes (PLO)</b>	PLO study program which is charged to the course						
	Program Objectives (PO)						
	PLO-PO Matrix						
		P.O					
<b>Short Course Description</b>	This course examines life phenomena related to numbers, algebra, measurement and geometry, probability and statistics, calculus and combinatorics and their application in mathematics learning in primary and secondary schools through active learning based on assignments and presentations.						
	References						
	<b>Main :</b>						
	<b>Supporters:</b>						
<b>Supporting lecturer</b>	SITI MAGHFIROTUN AMIN Prof. Rooselyna Ekawati, Ph.D. Shofan Fiangga, S.Pd., M.Sc. Ahmad Wachidul Kohar, S.Pd., M.Pd. Nina Rinda Prihartiwi, S.Pd., M.Pd.						
Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [ Estimated time]		Learning materials [ References ]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline ( offline )	Online ( online )		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Understand the meaning, philosophy and history of the development of Realistic Mathematics	Explains the meaning, philosophy and history of the development of Realistic Mathematics	<b>Criteria:</b> 0-10	Collaborative approach (discussion and expository) 2 X 50			0%

2	Understand the characteristics and principles of Realistic Mathematics Learning and their relationship to the curriculum	<ol style="list-style-type: none"> <li>1.Explain the characteristics of Realistic Mathematics Learning</li> <li>2.Explains the principles of Realistic Mathematics Learning</li> <li>3.Explain the relationship between Realistic Mathematics learning and the Curriculum</li> </ol>	<b>Criteria:</b> 1 - 10	Collaborative approach (discussion and expository) 2 X 50			0%
3	Identifying Mathematics learning in schools related to context integration	<ol style="list-style-type: none"> <li>1. Identifying the context of Mathematics learning steps</li> <li>2. Identifying problems with Mathematics learning and assessment in schools</li> </ol>	<b>Criteria:</b> 0-10	Expository: Observation assignments to schools regarding Mathematics learning steps in schools. 2 X 50			0%
4	Identifying Mathematics learning in schools related to context integration	<ol style="list-style-type: none"> <li>1. Identifying the context of Mathematics learning steps</li> <li>2. Identifying problems with Mathematics learning and assessment in schools</li> </ol>	<b>Criteria:</b> 0-10	Presentation and discussion of the results of identifying the steps for learning Mathematics at 2 X 50 schools			0%
5	Describe the types of context for learning Mathematics	Explain the types of contexts for learning Mathematics		2 X 50			0%
6	Identifying the context of several mathematical materials, namely numbers, algebra, measurement, geometry, probability & statistics, calculus and combinatorics in PMR textbooks and BSE Mathematics textbooks	Analyzing the context of several mathematical materials, namely numbers, algebra, measurement, geometry, probability & statistics, calculus and combinatorics in PMR books and BSE books		4 X 50			0%
7	Identifying the context of several mathematical materials, namely numbers, algebra, measurement, geometry, probability & statistics, calculus and combinatorics in PMR textbooks and BSE Mathematics textbooks	Analyzing the context of several mathematical materials, namely numbers, algebra, measurement, geometry, probability & statistics, calculus and combinatorics in PMR books and BSE books		4 X 50			0%
8	USS1			2 X 50			0%
9	Designing student's work in accordance with PMR	Designing student's work in accordance with PMR		2 X 50			0%
10	Designing student's work in accordance with PMR			2 X 50			0%

11	Understand appropriate assessments for Realistic Mathematics learning	Explains the assessment process in accordance with Realistic Mathematics learning		2 X 50			0%
12	Understand the meaning and examples of hypothetical learning trajectories for PMR			2 X 50			0%
13	Developing Hypothetical Learning Trajectories for Realistic Mathematics learning	Designing Hypothetical Learning Trajectories for Realistic Mathematics learning		2 X 50			0%
14	Communicating Hypothetical Learning Trajectories with the PMR approach	Communicating Hypothetical Learning Trajectories with the PMR approach		4 X 50			0%
15	Communicating Hypothetical Learning Trajectories with the PMR approach	Communicating Hypothetical Learning Trajectories with the PMR approach		4 X 50			0%
16							0%

#### Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

#### Notes

- Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
- The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
- Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
- Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
- Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
- Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
- Forms of assessment:** test and non-test.
- Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
- Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.