	Universitas Negeri Surabaya Faculty of Education, Bachelor of Primary School Teacher Education Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Number Learning and Data Processing	8620603077		T=3	P=0	ECTS=4.77	0	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Putri Rachmadyanti, S.Pd., M.Pd.

Learning model	**Case Studies**
Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**
	Program Objectives (PO)
	PLO-PO Matrix

	P.O

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Short Course Description	This course provides knowledge of learning number concepts in elementary school, including number operations, place value, GCF, LCM and fractions. The learning process includes activities that condition, study, practice, explore both individually and in groups as well as carrying out simulations. Evaluation of learning outcomes includes mid-semester exams, final semester exams, independent assignments, group assignments and class activities.
References	**Main :**

1. Heruman. 2007. Model Pembelajaran Matematika. Bandung: Rosda.
2. Hadi, Sutarto. 2005. Pendidikan Matematika Realistik. Banjarmasin: Tulip.
3. Karim, Muchtar A, dkk. 2011. Pendalaman Materi Matematika Dasar. Malang: Universitas Negeri Malang.
4. Kenedy, LM. Tapp S. 1994. Guiding Children 19s Learning of Mathematic (7th). California: Wodswith Publishing Company.

Supporters:	
Supporting lecturer	PURWANTO Drs. H. Budiyono, S.Pd., M.Pd. Dr. Wiryanto, M.Si. Drs. Ec. Budiono, M.Si. Neni Mariana, S.Pd., M.Sc., Ph.D. Ika Rahmawati, S.Si., M.Pd. Delia Indrawati, 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	Able to analyze number material and data processing in cross-country curricula	1. Able to map the concept of numbers and data processing in elementary schools in the KTSP, K13, Cambridge and Singapore curricula. 2. Able to compare the level of depth of number material and data processing in elementary school.	**Criteria:** Activeness and assignment results	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%
2	Mastering the concept of numbers and counting operations in elementary school	1. Able to learn the concept of numbers and arithmetic operations in elementary school. 2. apply spatial theory in learning number concepts 3. develop learning of number counting operations based on mental arithmetic to increase elementary school students' number sensitivity	**Criteria:** Activeness and mastery of material	1. Simulation2. Lecture3. Questions and Answers4. Discussion 3 X 50			0%
3	Mastering the concept of learning place value in elementary school	1. Able to teach the concept of place value in elementary school 2. Mastering techniques for learning the concept of place value in elementary school	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%

4	Mastering the concept of FPB learning in elementary schools	1. Able to teach FPB concepts in elementary schools 2. Mastering FPB concept learning techniques in elementary schools	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%
5	Mastering the concept of KPK learning in elementary schools	1. Able to teach the KPK concept in elementary schools 2. Master the techniques for learning the KPK concept in elementary schools	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%
6	Mastering the concept of learning Fractions in Elementary School	1. Able to teach the concept of fractions in elementary school. 2. Master the techniques for learning the concept of fractions in elementary school	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%
7	Mastering the concept of Data Processing in Elementary School	1. Able to teach data processing concepts in elementary schools 2. Master the techniques for learning data processing concepts in elementary schools	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%

8	Students are able to achieve half of the required course achievements	1. Mastering the concept of learning number concepts in elementary school 2. Mastering the concept of number operations in elementary school 3. Mastering the concept of learning place value in elementary school 4. Mastering the concept of FPB learning in elementary schools 5. Mastering the concept of KPK learning in elementary schools 6. Mastering the concept of learning Fractions in Elementary School 7. Mastering the concept of Data Processing in Elementary School	**Criteria:** Maximum Score 100	Sub Summative Exam 3 X 50			0%
9	Mastering the concept of making lesson plans focusing on number material and data processing in elementary schools.	1. Create lesson plans that refer to the 2013 Curriculum and KTSP 2. Create media for learning numbers and data processing in elementary schools	**Criteria:** Activeness and mastery of material	1. Lecture 2. Question and Answer 3. Discussion 3 X 50			0%
10	Developing media for learning number concepts	Able to create learning media for number concepts	**Criteria:** Activeness and mastery of material	1. Presentation 2. Questions and Answers 3. Discussion 3 X 50			0%
11	Developing media to teach number counting operations.	Able to create media to learn number counting operations	**Criteria:** Activeness and mastery of material	1. Presentation 2. Questions and Answers 3. Discussion 3 X 50			0%

12	Developing media to teach data processing in elementary school	Able to create media to teach data processing	**Criteria:** Activeness and mastery of material	practice making 3 X 50			0%
13	Simulating number learning and data processing in elementary schools (grades 1 and 2)	1. Able to create tools and media for learning numbers and data processing in elementary schools (Grades 1 and 2) 2. Able to simulate number learning and data processing in elementary schools (Grades 1 and 2)	**Criteria:** Activeness and mastery of material	1. Presentation 2. Questions and Answers 3. Discussion 3 X 50			0%
14	Simulates number learning and data processing in elementary schools (Grades 3 and 4)	1. Able to create tools and media for learning numbers and data processing in elementary schools (Grades 3 and 4) 2. Able to simulate number learning and data processing in elementary schools (Grades 3 and 4)	**Criteria:** Activeness and mastery of material	1. Presentation 2. Questions and Answers 3. Discussion 3 X 50			0%
15	Simulates number learning and data processing in elementary schools (Grades 5 and 6)	1. Able to create tools and media for learning numbers and data processing in elementary schools (Grades 5 and 6) 2. Able to simulate number learning and data processing in elementary schools (Grades 5 and 6)	**Criteria:** Activeness and mastery of material	1. Presentation 2. Questions and Answers 3. Discussion 3 X 50			0%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

Notes

1. **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.
2. **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.
3. **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.
4. **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.
5. **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.
6. **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.
7. **Forms of assessment:** test and non-test.
8. **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.
9. **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.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **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%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.