



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

Document Code

## SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Development of Teaching Materials	8420202004	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	3	August 12, 2022
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Dr. Pradnyo Wijayanti, M.Pd.		Dr. Pradnyo Wijayanti, M.Pd.			Dr. Endah Budi Rahaju, M.Pd.	

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	PLO study program which is charged to the course
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PLO-5	Demonstrate a scientific, critical and innovative attitude in teaching and learning mathematics and professional tasks
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PLO-8	Designing, implementing and evaluating mathematics learning using IT
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PLO-13	Demonstrate pedagogical knowledge in designing, implementing and evaluating mathematics learning.
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**Program Objectives (PO)**

PO - 1	Demonstrate knowledge about developing mathematics teaching materials in designing, implementing and evaluating Mathematics learning.
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PO - 2	Demonstrate knowledge about developing mathematics teaching materials in designing, implementing and evaluating Mathematics learning.
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**PLO-PO Matrix**

P.O	PLO-5	PLO-8	PLO-13
PO-1			
PO-2			

**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
PO-1																
PO-2																

Short Course Description	Study the meaning, types and role of teaching materials; understanding, procedures for developing teaching materials which include analysis of the concepts to be studied, the relationship between concepts and characteristics of students, and factors that influence the development of teaching materials; development and utilization of printed and non-printed teaching materials; evaluate teaching materials; and the use of the Internet as a learning resource accompanied by its implementation in mathematics learning through individual and group assignments with discussion and reflection activities.
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References	Main :
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<p>1. [1] Nana (2020). Pengembangan Bahan Ajar. Klaten: Penerbit Lakeisha. [2] Morrison, Gary R.; Ross, Steven J.; Morrison, Jennifer R.; Kalman, Howard K. (2019). Designing Effective Instruction (Eighth Edition). USA: John Wiley &amp; Sons. [3] Orey, Michael. 2009. Series: Educational Media and Technology Yearbook 34 . Dr Michael Orey, Dr V. J. McClendon, Dr Robert Maribe Branch (eds.). USA: Springer. [4] Pribadi, Benny Agus &amp; Putri, Dewi A. Padmo. 2019. Pengembangan Bahan Ajar. Edisi Kedua. Jakarta: Universitas Terbuka. [5] Kosasih. 2021. Pengembangan Bahan Ajar. Jakarta: Bumi Aksara. Referensi lain yang mendukung.</p>							
<p><b>Supporters:</b></p>							
<p><b>Supporting lecturer</b>  Dr. Hj. Masriyah, M.Pd.  Dr. Rini Setianingsih, M.Kes.  Dr. Susanah, M.Pd.  Dr. Pradnyo Wijayanti, M.Pd.  Prof. Dr. Tatag Yuli Eko Siswono, S.Pd., M.Pd.</p>							
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				Offline 100 minutes			0%
2							0%
3							0%
4							0%
5							0%
6							0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%
16							0%

**Evaluation Percentage Recap: Project Based Learning**

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.