

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

Document Code

SEMESTER LEARNING PLAN

Courses		CODE		C	ourse	Fam	ily	Credit Weight			S	EMES	TER	Con Date	npilati 9	on	
Innovative Le	earning	8420200004						т	'=3 F	P=0 E0	CTS=4.7	7	4		July	17, 20)24
AUTHORIZAT	ΓΙΟΝ	SP Develope	r						se Clu dinato				tudy P oordir		m		
		M.Pd. Dr. Pra Endah Budi R Setianingsih, Dr. Nonik Indi	Dr. Susanah, M.Pd. Dr. Masriyah, M.Pd. Dr. Pradnyo Wijayanti, M.Pd. Dr. Endah Budi Rahaju, M.Pd. Dr. Rini Setianingsih, M.Kes. Dr. Ismail, M.Pd. Dr. Nonik Indrawatiningsih, M.Pd, Dr. Ali Shodikin, M.Pd										Dr. Endah Budi Rahaju, M.Pd.			3	
Learning model	Project Based Le	earning															
Program	PLO study prog	ram which is cha	urged to	the	cours	se											
Learning Outcomes	Program Object	tives (PO)	-														
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	PO - 3	Able to communica	te ideas a	and r	esear	ch res	sults	effec	ctively	orally a	and in wr	iting.					
	PO - 4	Able to demonstrate a scientific, critical and innovative attitude towards differentiation learning materials, TaRL approach, CRT approach, direct teaching model, cooperative learning model, and scientific approach-oriented learning such as problem-based learning, discovery learning, and project-based learning, in designing, implementing and evaluating mathematics learning in professional assignments															
	PLO-PO Matrix																
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Short Course Descript	tion pro	T´approach, blem-based I thematics lear	direct teaching learning, discove	tages, classroom manage model, cooperative learn ery learning, and projec its implementation in learr S.	ing mod t-based	el, and scientific approa learning, in designing,	ach-oriented lear implementing a	rning such as			
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	Final al each le	oilities of arning		Evaluation		Help Learning, earning methods, Ident Assignments, [Estimated time]	Learning materials	Assessment			
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4	Designing direct teaching activities and simulating them (CLO-2) Able to demonstrate a scientific, critical and innovative attitude in Direct Instruction Model learning materials, and in professional assignments (CLO- 4)	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Offline 3 x 50'	Online using Google Meet	Material:DirectlearningReferences:[1] Nur, M.,Kardi, S.(2000). DirectTeaching.Surabaya:SchoolScience andMathematicsCenter. [2]Nur, M.(2000).CooperativeLearning.Surabaya:SchoolScience andMathematicsCenter. [3]Ibrahim, M.,Rachmadiarti,F., Ismono.(2005).CooperativeLearning.Surabaya:SchoolScience andMathematicsCenter [3]Ibrahim, M.,Rachmadiarti,F., Ismono.(2005).CooperativeLearning.Surabaya:Science andMathematicsCenter. [4]Ibrahim, M.(2012).ProblemBasedLearning IIEdition.Surabaya:UniversityPress [5]Arends, RI(202).Learning toTeach . 6thEdition. NewYork:McGraw-HillBookCompany. [6]Arends, RI(2004). Guideto FieldExperiencesand PortfolioDevelopment:toaccompanylearning toteach. NewYork:	10%
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						Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: Unesa University Press.	

5	Understanding the cooperative learning model in the learning process (CLO-1)	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Form of Assessment : Participatory Activities, Practice/Performance	Offline 3 x 50'	Online using Google Meet	Material: Cooperative Learning References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company. Material: Cooperative Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: University Press	5%
6	Understanding the cooperative learning model in the learning process (CLO-1)	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Form of Assessment : Participatory Activities, Practice/Performance	Offline 3 x 50'	Online using Google Meet	Material: Cooperative Learning References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company. Material: Cooperative Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: University Press	5%

7	Designing a cooperative learning model in the learning process (CLO-1)	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Offline 3 x 50'	Online using Google Meet	Material: Cooperative Learning References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company. Material: Cooperative Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: Unesa University Press	10%
8	Midterm Exam (UTS)	Accuracy in working on projects	Criteria: Accuracy in working on projects	Offline 100'			10%
9	 Understanding the PBL learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in PBL model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance	Offline 3 x 50'		Material: PBL References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: Unesa University Press Material: PBL References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company.	5%

10	 Designing a PBL learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in PBL model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Offline 3 x 50'	Material: PBL References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: Unesa University Press Material: PBL References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company.	10%
11	 Understanding the discovery learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in discovery model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Form of Assessment : Participatory Activities, Practice/Performance	Offline 3 x 50'	Material: Discovery Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: Unesa University Press Material: Discovery Learning References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company.	5%

12	 Designing a discovery learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in discovery model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Offline 3 x 50'	Material: Discovery Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: University Press Material:	10%
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13	 Understanding the PjBL learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in PjBL model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Form of Assessment : Participatory Activities, Practice/Performance	Offline 3 x 50'	Material: Discovery Learning References: [2] Wijayanti, P., Budiarto, MT, Ismail, Kurniasari, I., Prihartiwi, NR (2021). Student- Centered Mathematics Learning Model. Surabaya: University Press Material: Discovery Learning References: [3] Arends, RI (2012). Learning to Teach. 6th Edition. New York: McGraw-Hill Book Company.	5%

14	 Understanding the PjBL learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in PjBL model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Form of Assessment : Participatory Activities, Practice/Performance	Offline 3 x 50'	Material Discover Learning Referen [2] Wijay P., Budia MT, Ism Kurniasa Prihartiw (2021). Student- Centered Mathem Learning Model. Surabay Unesa Universi Press Material Discover Learning Referen [3] Arend (2012). Learning Teach. 6 Edition. 1 York: McGraw Book Compan	y ces: anti, arto, ail, ri, NR d atics a: y ces: ds, RI to th Vew -Hill
15	 Designing a PjBL learning model in the learning process (CLO- 1) Able to demonstrate a scientific, critical and innovative attitude in PjBL model learning materials, and in professional tasks (CLO-4) 	Authentic Assessment, assignments, and performance	Criteria: Authentic Assessment, assignments, and performance Forms of Assessment : Participatory Activities, Project Results Assessment, Product Assessment, Practices / Performance	Offline 3 x 50'	Material Discover Learning Referen [2] Wijay P., Budia MT, Ism. Kurniass Prihartim (2021). Student- Centered Mathema Learning Model. Surabay Unesa Universit Press Material Discover Learning Referen [3] Areno (2012). Learning Teach. 6 Edition. I York: McGraw Book Compan	: 10% y ces: anti, arto, ail, rri, I., i, NR d atics a: y ces: ds, RI to tho New -Hill
16			Form of Assessment : Project Results Assessment / Product Assessment	Offline 100'		10%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	31.65%
2.	Project Results Assessment / Product Assessment	26.65%
3.	Practice / Performance	31.65%
		89.95%

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.