



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Development of Science Learning Materials	8410102128		T=2	P=0	ECTS=4.48	2	July 18, 2024
AUTHORIZATION		SP Developer		Course Cluster Coordinator		Study Program Coordinator	
			Dr. Eko Hariyono, 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					
Short Course Description	Important ideas of learning models: (1) Direct Instruction, (2) Concept and Inquiry-based teaching, (3) Cooperative learning, (4) Problem-based learning, and learning tools for implementing these models in natural science learning presented and simulated						
	References						
Supporting lecturer	Main :						
	1. Arend, R. I, 2012. Learning to teach. 9th edition, Boston: Grow-Hilll Higher Education 2. Nur, M., 2008. Model pembelajaran langsung 3. Nur, M. 2008. Model pembelajaran kooperatif 4. Nur. M. 2008. Model PBL 5. Kurikulum 2013 6. Buku lain yang relevan						
	Supporters:						
	MOHAMAD NUR Prof. Dr. Erman, 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	Explains TCT models: direct instruction and Inquiry-based learning	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explain the important ideas of the TCT model 3.Explain the weaknesses and strengths of TCT models 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
2	Explains TCT models: direct instruction and concept and Inquiry-based learning	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explain the important ideas of the TCT model 3.Explain the weaknesses and strengths of TCT models 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
3	Explains TCT models: direct instruction and concept and Inquiry-based learning	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explain the important ideas of the TCT model 3.Explain the weaknesses and strengths of TCT models 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
4	Explains SCC models: cooperative learning, classroom discussion, and PBL	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explains important ideas in SCC models 3.Explain the advantages and disadvantages of SCC models in science learning 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
5	Explains SCC models: cooperative learning, classroom discussion, and PBL	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explains important ideas in SCC models 3.Explain the advantages and disadvantages of SCC models in science learning 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%

6	Explains SCC models: cooperative learning, classroom discussion, and PBL	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explains important ideas in SCC models 3.Explain the advantages and disadvantages of SCC models in science learning 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
7	Explains SCC models: cooperative learning, classroom discussion, and PBL	<ol style="list-style-type: none"> 1.Explain the theory supporting the model 2.Explains important ideas in SCC models 3.Explain the advantages and disadvantages of SCC models in science learning 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
8							0%
9	Curriculum analysis based on the results of the TCT and SCC studies	<ol style="list-style-type: none"> 1. Understanding KD curriculum competencies 2.Formulate indicators and goals 3.create an outline of teaching materials based on indicators and objectives 4.Create formats 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%
10	Curriculum analysis based on the results of the TCT and SCC studies	<ol style="list-style-type: none"> 1. Understanding KD curriculum competencies 2.Formulate indicators and goals 3.create an outline of teaching materials based on indicators and objectives 4.Create formats 	Criteria: 4: all descriptions are correct 3: descriptions are generally correct but there is one aspect where the explanation is wrong 2: Half of the descriptions are correct 1: all descriptions are incorrect	Class discussion and assignment 2 X 50			0%

11	Developing learning device prototypes: lesson plans, worksheets, LPs and student books for the TCT and SCC models	Developing prototype learning model tools: DI, C-IT, and PBL	Criteria: 4: The design conforms to the model and format 3: The design conforms to the model but does not conform to the format 2: Half of the designs do not conform to the model but conform to the format 1:: The design does not conform to the model and/or does not conform to the format	Workshop and presentation-simulation 2 X 50			0%
12	Developing learning device prototypes: lesson plans, worksheets, LPs and student books for the TCT and SCC models	Developing prototype learning model tools: DI, C-IT, and PBL	Criteria: 4: The design conforms to the model and format 3: The design conforms to the model but does not conform to the format 2: Half of the designs do not conform to the model but conform to the format 1:: The design does not conform to the model and/or does not conform to the format	Workshop and presentation-simulation 2 X 50			0%
13	Developing learning device prototypes: lesson plans, worksheets, LPs and student books for the TCT and SCC models	Developing prototype learning model tools: DI, C-IT, and PBL	Criteria: 4: The design conforms to the model and format 3: The design conforms to the model but does not conform to the format 2: Half of the designs do not conform to the model but conform to the format 1:: The design does not conform to the model and/or does not conform to the format	Workshop and presentation-simulation 2 X 50			0%
14	Developing learning device prototypes: lesson plans, worksheets, LPs and student books for the TCT and SCC models	Developing prototype learning model tools: DI, C-IT, and PBL	Criteria: 4: The design conforms to the model and format 3: The design conforms to the model but does not conform to the format 2: Half of the designs do not conform to the model but conform to the format 1:: The design does not conform to the model and/or does not conform to the format	Workshop and presentation-simulation 2 X 50			0%
15	Developing learning device prototypes: lesson plans, worksheets, LPs and student books for the TCT and SCC models	Developing prototype learning model tools: DI, C-IT, and PBL	Criteria: 4: The design conforms to the model and format 3: The design conforms to the model but does not conform to the format 2: Half of the designs do not conform to the model but conform to the format 1:: The design does not conform to the model and/or does not conform to the format	Workshop and presentation-simulation 2 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.