



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date																																																																																			
Dissertation Support	8400104057	Compulsory Study Program Subjects	T=4	P=0	ECTS=10.08	2	January 10, 2023																																																																																			
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator																																																																																				
	Prof. Dr. Budi Jatmiko, M.Pd.		Prof. Dr. Budi Jatmiko, M.Pd.			Prof. Dr. Suyatno, M.Si.																																																																																				
Learning model	Project Based Learning																																																																																									
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																																																																									
	PLO-12	2. Master the latest theories related to scientific knowledge and science education																																																																																								
	Program Objectives (PO)																																																																																									
	PO - 1	Develop knowledge and technology in the field of expertise that will be pursued in accordance with the research plan for the dissertation through research, to produce creative, original and tested work.																																																																																								
	PO - 2	Solve problems in the area of expertise that will be pursued in accordance with the research plan for the dissertation through an inter or multi or transdisciplinary approach.																																																																																								
	PO - 3	Manage, lead and develop research and development in the field of expertise to be pursued in accordance with the research plan for the dissertation which is beneficial for science and the benefit of humanity, and is able to gain national and international recognition.																																																																																								
	PLO-PO Matrix																																																																																									
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">P.O</td> <td colspan="6" style="text-align: center;">PLO-12</td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">PO-2</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">PO-3</td> <td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>						P.O	PLO-12						PO-1							PO-2							PO-3																																																													
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PO Matrix at the end of each learning stage (Sub-PO)																																																																																										
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2" style="text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">7</td><td style="text-align: center;">8</td><td style="text-align: center;">9</td><td style="text-align: center;">10</td><td style="text-align: center;">11</td><td style="text-align: center;">12</td><td style="text-align: center;">13</td><td style="text-align: center;">14</td><td style="text-align: center;">15</td><td style="text-align: center;">16</td> </tr> <tr> <td style="text-align: center;">PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">PO-2</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td style="text-align: center;">PO-3</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>						P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																	PO-2																	PO-3																
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Short Course Description	This dissertation supporting course, the contents and name of the course are determined by the promoter together with the Head of the Study Program, adjusted to the dissertation needs of the student concerned. The aim of this course is to provide students with the opportunity to deepen the field of expertise they will pursue in accordance with the research plan for the dissertation. It is hoped that this independent study will finalize the research design for the dissertation under expert guidance.																																																																																									
References	Main :																																																																																									
	1. Ditentukan sesuai dengan bidang studi yang dipilih																																																																																									
	Supporters:																																																																																									

Supporting lecturer		Prof. Dr. Achmad Lutfi, M.Pd. Prof. Dr. Budi Jatmiko, M.Pd. Prof. Dr. Suyatno, M.Si. Dr. Eko Hariyono, S.Pd., M.Pd. Prof. Nadi Suprpto, S.Pd., M.Pd., Ph.D. Dr. Binar Kurnia Prahani, 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, have clear direction and targets regarding the dissertation plan to be developed, including strategies for completing the dissertation.	Presenting writing containing an action plan for completing the dissertation.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	<ul style="list-style-type: none"> Literature study by students before face-to-face (virtual face-to-face). Discussion between parties (students, promoters and co-promoters) using the case method for 4 x 50 minutes 		Material: Development of action plans, General references in writing: APA, PUPBI. References:	5%
2	Produce a review of presentation material (by the promoter & co-promoter) regarding the background and formulation of the problem to be solved through dissertation research.	<ol style="list-style-type: none"> The results of the gap analysis between das Sollen and das Sein are the background for the formulation of the problem. Formulation of the problem to be solved through dissertation research. 	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	<p>Outside of face-to-face hours: Review of various related literature using the gap analysis method (PjBL) Face-to-face to discuss student analysis results 4 x 50 minutes</p>		Material: Textbook related to standards; Related and latest articles; Legal Products contain government policies in the field of library education:	5%
3	Produce a review of presentation material (by the promoter & co-promoter) regarding the background and formulation of the problem to be solved through dissertation research.	<ol style="list-style-type: none"> The results of the gap analysis between das Sollen and das Sein are the background for the formulation of the problem. Formulation of the problem to be solved through dissertation research. 	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	<p>Outside of face-to-face hours: Review of various related literature using the gap analysis method (PjBL) Face-to-face to discuss the results of student analysis with an allocation of 4 x 50 minutes</p>		Material: Textbook related to standards; Related and latest articles; Legal Products contain government policies in the field of library education:	5%

4	Produce a review of presentation material (by the promoter & co-promoter) regarding the conceptual definition and operational definition of the dissertation research variables.	1. Formulation of a conceptual definition of dissertation research variables. 2. Formulation of operational definitions of dissertation research variables.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Outside of face-to-face hours: Review of various literature related to dissertation research variables (PjBL) Face-to-face to discuss the results of conceptual and operational formulation of research variables 4 x 50 minutes		Material: Textbook related to standards; Related and latest articles. References:	5%
5	Produce a reviewed presentation material (by the promoter & co-promoter) of the conceptual framework of the initial generation of dissertation research, which describes the connectivity between variables contained in the formulation of the problem to be solved.	Produce a conceptual framework for dissertation research.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Practice of developing a Conceptual Framework Researchers use syllogism logic through PjBL. Carried out before the face to face meeting and discussed with the supervisor for 4 x 50 minutes		Material: PPT How to develop a thinking framework or research conceptual framework Literature:	7%
6	Produce an initial design (raw blueprint) for (!) implementation of actions in manifesting treatment variables and (2) development of instruments to assess response variables.	1. Produce an initial design for implementing actions in realizing treatment variables 2. Produce an initial design for instrument development to assess response variables.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Content Analysis by students of various library sources supporting dissertation writing. The work produced outside face-to-face hours is then discussed with the promoter and co-promoter. The method used is PjBL 4 x 50 minutes		Material: Organizing thoughts into a tabulation system to facilitate presentation. References:	7%
7	Produce an initial design (raw blueprint) for (!) implementation of actions in manifesting treatment variables and (2) development of instruments to assess response variables.	1. Produce an initial design for implementing actions in realizing treatment variables 2. Produce an initial design for instrument development to assess response variables.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Content Analysis by students of various library sources supporting dissertation writing. The work produced outside face-to-face hours is then discussed with the promoter and co-promoter. The learning model used by PjBL. 4 x 50 minutes		Material: Organizing thoughts into a tabulation system to facilitate presentation. References:	7%

8	Final Capabilities from TM-1 to TM-7	TM-1 indicators up to TM-7 indicators	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Written test or assignment to replace UTS 4 x 50 minutes		<p>Material: Learning topics from TM-1 to TM-7</p> <p>Library:</p>	5%
9	Produce researched work in the form of a grid (blue-print) for the development of response variable measuring instruments and assessment rubrics.	Produce a grid (blue-print) for developing instruments to measure response variables and assessment rubrics	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Instrument development tasks, according to development research methods. The learning model used by PjBL is 4 x 50 minutes		<p>Material: Related and latest articles</p> <p>References:</p>	7%
10	Produce five examples of test items measuring response variables reviewed by promoters and co-promoters.	Produce five examples of test items measuring response variables reviewed by promoters and co-promoters	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Presentation of 5 examples of test items measuring response variables. The learning model used by PjBL is 4 x 50 minutes		<p>Material: Related scientific articles containing instructions for preparing question grids</p> <p>References:</p>	7%
11	Produce review and validation sheets for feasibility testing of response variable measuring instruments.	Produce review sheets and validate test items measuring response variables reviewed by promoters and co-promoters	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Developed outside face-to-face hours and then discussed with the supervisor during face-to-face hours. The learning model used by PjBL is 4 x 50 minutes		<p>Material: Related scientific articles containing instructions for preparing question grids.</p> <p>References:</p>	7%
12	Produce researched work (by promoters and co-promoters) in the form of a blueprint for implementing actions in the implementation of treatment variables, including standard operating procedures (POS).	Produce analysis results of scientific articles, especially on 4 ways of conditioning the accommodation process	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Article Review and presentation of results. The learning model used by PjBL is 4 x 50 minutes		<p>Material: Related and latest scientific articles; Files of analysis results that were created by Rosalina Permatasari</p> <p>Pustaka:</p>	7%
13	Produce an initial draft regarding learning devices in implementing POS as mentioned above.	Produce a development grid (blue-print) and initial draft of learning or training devices.	<p>Criteria: Based on the assessment rubric that has been created by the teaching lecturer</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Instrument development tasks, according to the development panel method. Then discussed with the supervisor. The learning model used by PjBL is 4 x 50 minutes		<p>Material: Related and latest articles</p> <p>References:</p>	7%

14	Produce a final draft regarding learning devices in implementing POS as mentioned above.	Final draft of learning devices for implementing POS.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	CC strategy development practices. The learning model used by PjBL is 4 x 50 minutes		Material: Related and latest scientific articles; Dissertation written by Napsin Palisoa and Ayun. References:	7%
15	Produce test and validation sheets for feasibility testing of learning devices or training devices.	Produce review and validation sheets for feasibility testing of learning devices or training devices.	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Developed outside face-to-face hours and then discussed with the supervisor during 4 x 50 minute face-to-face hours		Material: Related scientific articles containing instructions for preparing question grids. References:	5%
16	Final Capabilities from TM-9 to TM-15	TM-9 indicators up to TM-15 indicators	Criteria: Based on the assessment rubric that has been created by the teaching lecturer Form of Assessment : Project Results Assessment / Product Assessment	Written test or assignment as a substitute for UAS 4 x 50 minutes		Material: Learning topics from TM-9 to TM-15 Library:	7%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Project Results Assessment / Product Assessment	100%
		100%

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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.

