



**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 Eligibility	8400102047	Compulsory Study Program Subjects	T=2 P=0 ECTS=5.04	4	June 20, 2022																																																																																																				
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>		<b>Study Program Coordinator</b>																																																																																																				
	Prof. Dr. Suyatno, M.Si.		Prof. Dr. Suyatno, M.Si.		Prof. Dr. Suyatno, M.Si.																																																																																																				
<b>Learning model</b>	<b>Project Based Learning</b>																																																																																																								
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program which is charged to the course</b>																																																																																																								
	<b>Program Objectives (PO)</b>																																																																																																								
	<b>PO - 1</b>	Have logic, ethics, honesty, as well as a critical and open attitude in producing research.																																																																																																							
	<b>PO - 2</b>	Apply scientific concepts, theories and methodologies in conducting and reporting research results																																																																																																							
	<b>PO - 3</b>	Produce problem solving through inter, multi and transdisciplinary approaches.																																																																																																							
	<b>PO - 4</b>	Manage and develop research scientifically according to their scientific field so as to produce accountable decisions																																																																																																							
	<b>PLO-PO Matrix</b>																																																																																																								
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>P.O</td></tr> <tr><td>PO-1</td></tr> <tr><td>PO-2</td></tr> <tr><td>PO-3</td></tr> <tr><td>PO-4</td></tr> </table>				P.O	PO-1	PO-2	PO-3	PO-4																																																																																															
	P.O																																																																																																								
	PO-1																																																																																																								
PO-2																																																																																																									
PO-3																																																																																																									
PO-4																																																																																																									
<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																																																																																																									
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <tr><td>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>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>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> <tr><td>PO-4</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> </tbody> </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																	PO-4																
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																																																																																																									
PO-4																																																																																																									
<b>Short Course Description</b>	Application of various concepts, theories and methodologies according to the chosen research focus or topic, locus or source of research data, and scientific mode or perspective used in an original, innovative and transdisciplinary manner. The product of this course is in the form of a dissertation manuscript including title, introduction (background, problem/focus, objectives/benefits, definitions of research terms/variables), theoretical studies, research methods, research results, discussions/discussions, conclusions, and suggestions/recommendations. The dissertation manuscript was assessed for suitability for the quality of the dissertation content by 3 assessors, consisting of 2 assessors from within the study program, while one other assessor was from a similar study program outside Surabaya State University.																																																																																																								
<b>References</b>	<b>Main :</b>																																																																																																								

1. Creswell, J.W. (2014). *Research Design. Qualitative, Quantitative and Mixed Methods Approaches*. 4th Ed. New York: Sage
2. Sugiyono (2015). *Metode Penelitian Pendidikan. Pendekatan Kuantitatif, Kualitatif dan R &D*. Cetakan ke-22. Bandung: Alfabeta.
3. Tim (2022). *Pedoman Penulisan Tesis dan Disertasi*. Surabaya: Pascasarjana Unesa.
4. Yin, R.K. (2016). *Qualitative Reasearch from Strat to Finish*. 2nd Ed. New York: Guilford Press

**Supporters:**

1. Artikel dalam jurnal yang relevan dengan topik penelitian disertasi

**Supporting lecturer**

Prof. Dr. Suyatno, M.Si.

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 develop research instruments	Accuracy in developing research instruments	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of research instruments <b>Reference:</b> Sugiyono (2015). <i>Educational Research Methods. Quantitative, Qualitative and R&amp;D Approaches</i>. 22nd printing. Bandung: Alfabeta.</p>	5%
2	Able to develop research instruments	Accuracy in developing research instruments	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of research instruments <b>References:</b> Creswell, JW (2014). <i>Research Design. Qualitative, Quantitative and Mixed Methods Approaches</i>. 4th Ed. New York: Sage</p>	5%
3	Able to develop research instruments	Accuracy in developing research instruments	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of research instruments <b>References:</b> Team (2022). <i>Guidelines for Writing Theses and Dissertations</i>. Surabaya: Unesa Postgraduate.</p>	5%
4	Able to develop research instruments	Accuracy in developing research instruments	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of research instruments <b>References:</b> Team (2022). <i>Guidelines for Writing Theses and Dissertations</i>. Surabaya: Unesa Postgraduate.</p>	5%

5	Able to prepare research instrument validation instruments and carry out validation	Accuracy in compiling research instrument validation instruments and carrying out validation	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of validation instruments <b>Reference:</b> Sugiyono (2015). <i>Educational Research Methods. Quantitative, Qualitative and R&amp;D Approaches. 22nd printing. Bandung: Alfabeta.</i></p>	5%
6	Able to prepare research instrument validation instruments and carry out validation	Accuracy in compiling research instrument validation instruments and carrying out validation	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Development of validation instruments <b>References:</b> Team (2022). <i>Guidelines for Writing Theses and Dissertations. Surabaya: Unesa Postgraduate.</i></p>	5%
7	Able to carry out research for data collection	Accuracy in carrying out research for data collection	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Implementation of educational research <b>References:</b> Creswell, JW (2014). <i>Research Design. Qualitative, Quantitative and Mixed Methods Approaches. 4th Ed. New York: Sage</i></p>	5%
8	Able to carry out research for data collection	Accuracy in carrying out research for data collection	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Carrying out research for data collection <b>References:</b> Creswell, JW (2014). <i>Research Design. Qualitative, Quantitative and Mixed Methods Approaches. 4th Ed. New York: Sage</i></p>	5%
9	Able to carry out research for data collection	Accuracy in carrying out research for data collection	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Carrying out research for data collection <b>Reference:</b> Sugiyono (2015). <i>Educational Research Methods. Quantitative, Qualitative and R&amp;D Approaches. 22nd printing. Bandung: Alfabeta.</i></p>	5%

10	Able to carry out research for data collection	Accuracy in carrying out research for data collection	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Carrying out research for data collection</p> <p><b>Reference:</b> Sugiyono (2015). <i>Educational Research Methods. Quantitative, Qualitative and R&amp;D Approaches. 22nd printing. Bandung: Alfabeta.</i></p>	5%
11	Able to carry out research for data collection	Accuracy in carrying out research for data collection	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Carrying out research for data collection</p> <p><b>References:</b> Yin, RK (2016). <i>Qualitative Research from Strat to Finish. 2nd Ed. New York: Guilford Press</i></p>	5%
12	Able to analyze research data	Accuracy in analyzing research data	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Analyzing research data.</p> <p><b>Library:</b> Sugiyono (2015). <i>Educational Research Methods. Quantitative, Qualitative and R&amp;D Approaches. 22nd printing. Bandung: Alfabeta.</i></p>	5%
13	Able to analyze research data	Accuracy in analyzing research data	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Analyzing research data</p> <p><b>References:</b> Creswell, JW (2014). <i>Research Design. Qualitative, Quantitative and Mixed Methods Approaches. 4th Ed. New York: Sage</i></p>	10%
14	Able to compose a dissertation	Accuracy in compiling a dissertation	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Preparing a dissertation</p> <p><b>Reference:</b> Team (2022). <i>Guidelines for Writing Theses and Dissertations. Surabaya: Unesa Postgraduate.</i></p>	10%

15	Able to compose a dissertation	Accuracy in compiling a dissertation	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Discussion, presentation and PjBL 2 x 50 minutes	Discussion, presentation and PjBL 2 x 50 minutes	<p><b>Material:</b> Preparing a dissertation</p> <p><b>Reference:</b> <i>Team (2022). Guidelines for Writing Theses and Dissertations. Surabaya: Unesa Postgraduate.</i></p>	10%
16	Able to carry out dissertation eligibility tests	The quality of the dissertation manuscript	<p><b>Criteria:</b> Based on the assessment rubric that has been created by the teaching lecturer</p> <p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	Evaluation of the dissertation manuscript by 3 assessors consisting of 2 examiners from within the study program and 1 examiner from a similar study program outside Surabaya State University. Maximum 30 days	Evaluation of the dissertation manuscript by 3 assessors consisting of 2 examiners from within the study program and 1 examiner from a similar study program outside Surabaya State University. Maximum 30 days	<p><b>Material:</b> Carrying out a dissertation eligibility test</p> <p><b>Reader:</b> <i>Team (2022). Guidelines for Writing Theses and Dissertations. Surabaya: Unesa Postgraduate.</i></p>	10%

#### 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** 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.
- 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.

