	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
Study of Research Results	8400104056	Compulsory Study Program Subjects	**T=4 P=0 ECTS=10.08**	1	June 20, 2022

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-8	2. Able to prepare scientific arguments and solutions based on a critical view of facts, concepts, principles or theories that can be justified scientifically and academically, and communicate them through scientific publications in reputable international journals
	PLO-12	2. Master the latest theories related to scientific knowledge and science education
	Program Objectives (PO)	
	PO - 1	Discovering the novelty of doctoral research through dissertation study.
	PO - 2	Creating Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.
	PO - 3	Create a doctoral research design that meets KKNI level 9 in the form of a dissertation proposal.
	PLO-PO Matrix	

P.O	PLO-8	PLO-12
PO-1		
PO-2		
PO-3		

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																
PO-3																

Short Course Description	This course facilitates students to obtain a doctoral research design that meets KKNI level 9 in the form of a dissertation proposal. Activities carried out by students include: (1) Analyzing the novelty of doctoral research through dissertation studies, (2) Making Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies. Through this course, it is hoped that students will be able to produce a dissertation proposal that is ready for seminars, equipped with a minimum of Model Books/Learning Tools/Research Instruments as an operational form of their dissertation.	
References	**Main :**	

1. Creswell, W. J. (2014). Research design: Qualitative, quantitative, and mixed method approaches 4th edition. USA: SAGE Publications.
2. Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). How to design and evaluate research in education (8th ed.). New York: McGraw-Hill.
3. Artikel Jurnal terkait penelitian Pendidikan Sains-Fisika yang relevan berbasis database Bereputasi (Web of Science dan Scopus).

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 Suprapto, 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	1. Analyzing the results of science education doctoral research 2. Discovering the novelty of science education doctoral research from the results of dissertation studies	Analyzing the novelty of doctoral research through dissertation studies	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL 4x50 minutes	**Material:** Dissertation/Publication of dissertation results (Reference no. 1,2,3,4) **References:**	5%
2	1. Analyzing the results of science education doctoral research 2. Discovering the novelty of science education doctoral research from the results of dissertation studies	Analyzing the novelty of doctoral research through dissertation studies	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** Dissertation/Publication of dissertation results (Reference no. 1,2,3,4) **References:**	5%
3	Prepare the Preliminary Section of the Science Education Doctoral Dissertation Research Design that meets KKNI level 9	Creating the Introduction to the Research Design of a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** regarding the introductory chapter (References 1,2,3,4) **References:**	8%
4	Prepare the Preliminary Section of the Science Education Doctoral Dissertation Research Design that meets KKNI level 9	Creating the Introduction to the Research Design of a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** Regarding the introductory chapter (References 1,2,3,4) **References:**	8%
5	Compile the Literature Review Section of the Science Education Doctoral Dissertation Research Design that meets KKNI level 9	Creating a Literature Review Section Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** Regarding the Literature Review Chapter (References 1,2,3,4) **Literature:**	8%
6	Compile the Literature Review Section of the Science Education Doctoral Dissertation Research Design that meets KKNI level 9	Creating a Literature Review Section Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL 4x50 minutes	**Material:** Regarding the Literature Review Chapter (References 1,2,3,4) **Literature:**	8%

7	Compile the Literature Review Section of the Science Education Doctoral Dissertation Research Design that meets KKNI level 9	Creating a Literature Review Section Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion and PjBL 4 x 50 minutes	**Material:** Regarding the Literature Review Chapter (References 1,2,3,4) **Literature:**	8%
8	Final Capabilities from TM-1 to TM-7	TM-1 indicators up to TM-7 indicators	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Test	Written test or assignment to replace UTS 4 x 50 minutes		**Material:** Learning topics from TM-1 to TM-7 **Library:**	5%
9	Developing Research Methods for Science Education Doctoral Dissertation Research Designs that meet KKNI level 9	Creating a Research Method Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL 4x50 minutes	**Material:** Regarding the Research Methods Chapter (References 1,2,3,4) **References:**	5%
10	Developing Research Methods for Science Education Doctoral Dissertation Research Designs that meet the KKNI level	Creating a Research Method Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** Regarding the Research Methods Chapter (References 1,2,3,4) **References:**	5%
11	Developing Research Methods for Science Education Doctoral Dissertation Research Designs that meet KKNI level 9	Creating a Research Method Research Design for a Science Education Doctoral Dissertation	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL	**Material:** Regarding the Research Methods Chapter (References 1,2,3,4) **References:**	5%
12	Preparing Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	Creating Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL 4x50 minutes	**Material:** Operational forms of products to support dissertation studies (Reference no. 1,2,3,4) **References:**	5%
13	Preparing Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	Creating Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion, and PjBL 4x 50 minutes	**Material:** Operational forms of products to support dissertation studies (Reference no. 1,2,3,4) **References:**	5%

14	Preparing Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	Creating Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion and PjBL 4 x 50 minutes	**Material:** Operational forms of products to support dissertation studies (Reference no. 1,2,3,4) **References:**	5%
15	Preparing Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	Creating Model Books/Learning Tools/Research Instruments as a form of operational support for dissertation studies.	**Criteria:** Based on the assessment rubric that has been created by the teaching lecturer **Form of Assessment** : Project Results Assessment / Product Assessment	Flip learning, Discussion and PjBL 4 x 50 minutes	Flip learning, Discussion and PjBL 4 x 50 minutes	**Material:** Operational forms of products to support dissertation studies (Reference no. 1,2,3,4) **References:**	10%
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** : Test	Written test or assignment as a substitute for UAS 4 x 50 minutes		**Material:** Learning topics from TM-9 to TM-15 **Library:**	5%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Project Results Assessment / Product Assessment	90%
2.	Test	10%
		100%

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** 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.
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.