



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Study of Science Education Research Results	8420103064		T=3	P=0	ECTS=4.77	6	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model Project Based Learning

Program Learning Outcomes (PLO)	PLO study program that is charged to the course																
	Program Objectives (PO)																
	PLO-PO Matrix																
	P.O																
	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

Short Course Description Discussion of at least 5 recent articles (last 5 years) published in international journals (4 articles) and published in nationally accredited journals (1 article) that are relevant to the student's thesis research idea through search, analysis, summary, creation and presentation activities.

References	Main :
	<ol style="list-style-type: none"> 1. <ol style="list-style-type: none"> 1. Journal of Research in Science Teaching, Vol 54, No. 4 April, 2017, Wiley & Son 2. Journal of Teaching Science, 56 (1), March 2010, ASTA 3. Journal of Teaching Science, 56 (2), June 2010, ASTA 4. Journal of Teaching Science, 56 (3), June 2010, ASTA 5. Jurnal Penelitian Pendidikan IPA Indonesia, PPII & Unnes 6. Jurnal Ilmu Pendidikan (JIP), Ikatan Sarjana Pendidikan Indonesia, UM 7. Jurnal lain yang relevan
	Supporters:

Supporting lecturer Dra. Martini, M.Pd.
 Prof. Dr. Erman, M.Pd.
 Dr. Mohammad Budiyanto, 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	Exploring international and nationally accredited journals for science education research results from various sources by utilizing science and technology results	1. Determine the field/topic of the science education research thesis research 2. Explore 1 article of science education research results from a nationally accredited journal that is in accordance with the scope of the thesis topic 3. Explore 4 articles of science education research results from international journals that are in accordance with the scope of the thesis topic 4. Select the results of science education research that are most relevant to the thesis field (1 nationally accredited journal article and 4 international journal articles	Criteria: 1. Using an assessment rubric: Score 4, if all articles (4 international journals and 1 nationally accredited journal) are relevant to the thesis idea 2. Score 3, if 3 international journal articles and 1 nationally accredited journal are relevant to the thesis idea. Score 2, if 2 international journal articles and no nationally accredited journal are relevant to the thesis idea. Score 1, if 1 international journal article or 1 nationally accredited journal is relevant. with a thesis idea	Assignment to explore articles in the latest international journals and 3 X 50 nationally accredited journals		0%
2	Exploring international and nationally accredited journals for science education research results from various sources by utilizing science and technology results	1. Determine the field/topic of the science education research thesis research 2. Explore 1 article of science education research results from a nationally accredited journal that is in accordance with the scope of the thesis topic 3. Explore 4 articles of science education research results from international journals that are in accordance with the scope of the thesis topic 4. Select the results of science education research that are most relevant to the thesis field (1 nationally accredited journal article and 4 international journal articles	Criteria: 1. Using an assessment rubric: Score 4, if all articles (4 international journals and 1 nationally accredited journal) are relevant to the thesis idea 2. Score 3, if 3 international journal articles and 1 nationally accredited journal are relevant to the thesis idea. Score 2, if 2 international journal articles and no nationally accredited journal are relevant to the thesis idea. Score 1, if 1 international journal article or 1 nationally accredited journal is relevant. with a thesis idea	Assignment to explore articles in the latest international journals and 3 X 50 nationally accredited journals		0%

3	Analyze articles resulting from science education research	<ol style="list-style-type: none"> 1. Analyzing articles resulting from science education research 2. Explain the components of the article clearly and correctly 3. Identify the strengths and weaknesses of research results in the articles analyzed 4. Make a summary of the analysis results 	Criteria: Score 4, if the analysis of the article in items (1, 2, and 3) is complete and correct Score 3, if one of the items is incomplete or incorrect Score 2, if two of the 3 items are incomplete or incorrect Score 1, if only 1 or not some are explained completely and correctly	3 X 50 article analysis assignment			0%
4	Analyze articles resulting from science education research	<ol style="list-style-type: none"> 1. Analyzing articles resulting from science education research 2. Explain the components of the article clearly and correctly 3. Identify the strengths and weaknesses of research results in the articles analyzed 4. Make a summary of the analysis results 	Criteria: Score 4, if the analysis of the article in items (1, 2, and 3) is complete and correct Score 3, if one of the items is incomplete or incorrect Score 2, if two of the 3 items are incomplete or incorrect Score 1, if only 1 or not some are explained completely and correctly	3 X 50 article analysis assignment			0%
5	Analyze articles resulting from science education research	<ol style="list-style-type: none"> 1. Analyzing articles resulting from science education research 2. Explain the components of the article clearly and correctly 3. Identify the strengths and weaknesses of research results in the articles analyzed 4. Make a summary of the analysis results 	Criteria: Score 4, if the analysis of the article in items (1, 2, and 3) is complete and correct Score 3, if one of the items is incomplete or incorrect Score 2, if two of the 3 items are incomplete or incorrect Score 1, if only 1 or not some are explained completely and correctly	3 X 50 article analysis assignment			0%

6	Analyze articles resulting from science education research	<ol style="list-style-type: none"> 1. Analyzing articles resulting from science education research 2. Explain the components of the article clearly and correctly 3. Identify the strengths and weaknesses of research results in the articles analyzed 4. Make a summary of the analysis results 	Criteria: Score 4, if the analysis of the article in items (1, 2, and 3) is complete and correct Score 3, if one of the items is incomplete or incorrect Score 2, if two of the 3 items are incomplete or incorrect Score 1, if only 1 or not some are explained completely and correctly	3 X 50 article analysis assignment			0%
7	Analyze articles resulting from science education research	<ol style="list-style-type: none"> 1. Analyzing articles resulting from science education research 2. Explain the components of the article clearly and correctly 3. Identify the strengths and weaknesses of research results in the articles analyzed 4. Make a summary of the analysis results 	Criteria: Score 4, if the analysis of the article in items (1, 2, and 3) is complete and correct Score 3, if one of the items is incomplete or incorrect Score 2, if two of the 3 items are incomplete or incorrect Score 1, if only 1 or not some are explained completely and correctly	3 X 50 article analysis assignment			0%
8	Exploring articles resulting from science education research in international and nationally accredited journals Analyzing articles resulting from science education research	All indicators for both learning outcomes	Criteria: Rubric (written at every meeting)	Assignment 3 X 50			0%
9	Presenting the results of analysis of science education research	<ol style="list-style-type: none"> 1. Create a Ppt summarizing the results of the article analysis 2. Ppt Presentation 	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%

10	Presenting the results of analysis of science education research	1.Create a Ppt summarizing the results of the article analysis 2.PPt Presentation	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%
11	Presenting the results of analysis of science education research	1.Create a Ppt summarizing the results of the article analysis 2.PPt Presentation	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%
12	Presenting the results of analysis of science education research	1.Create a Ppt summarizing the results of the article analysis 2.PPt Presentation	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%
13	Presenting the results of analysis of science education research	1.Create a Ppt summarizing the results of the article analysis 2.PPt Presentation	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%
14	Presenting the results of analysis of science education research	1.Create a Ppt summarizing the results of the article analysis 2.PPt Presentation	Criteria: Score 4, if the presentation is correct and complete Score 3, if the presentation is incomplete but correct Score 2, if the presentation is incomplete and partly incorrect Score 1, if the presentation is incomplete and incorrect	Assignment 3 X 50			0%
15	Draft a thesis proposal based on the results of the article analysis	1.Determining thesis research idea 2.Prepare a draft thesis proposal	Criteria: 4, if the proposal is in accordance with the results of the article analysis and is logical 3, if the proposal is not in accordance with the results of the article analysis but is logical 2, if the proposal is not in accordance with the results of the article analysis and is not logical 1, if it is not appropriate and is not logical	Assignment 3 X 50			0%
16							0%

Evaluation Percentage Recap: Project Based Learning

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.