



**Universitas Negeri Surabaya**  
**Faculty of Education,**  
**Early Childhood Education Teacher Education Undergraduate Study**  
**Program**

Document Code

**SEMESTER LEARNING PLAN**

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>	<b>SEMESTER</b>	<b>Compilation Date</b>																																											
AUD Science and Mathematics	8620702188		T=2 P=0 ECTS=3.18	4	July 18, 2024																																											
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>	<b>Study Program Coordinator</b>																																												
	.....		.....	Kartika Rinakit Adhe, S.Pd., M.Pd.																																												
<b>Learning model</b>	Case Studies																																															
<b>Program Learning Outcomes (PLO)</b>	PLO study program that is charged to the course																																															
	Program Objectives (PO)																																															
	PLO-PO Matrix																																															
		<table border="1" style="margin: auto;"> <tr> <td style="width: 10%;">P.O</td> <td colspan="15"></td> </tr> </table>					P.O																																									
P.O																																																
<b>Short Course Description</b>	PO Matrix at the end of each learning stage (Sub-PO)																																															
		<table border="1" style="margin: auto;"> <tr> <td rowspan="2" style="width: 10%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 5%;">1</td> <td style="width: 5%;">2</td> <td style="width: 5%;">3</td> <td style="width: 5%;">4</td> <td style="width: 5%;">5</td> <td style="width: 5%;">6</td> <td style="width: 5%;">7</td> <td style="width: 5%;">8</td> <td style="width: 5%;">9</td> <td style="width: 5%;">10</td> <td style="width: 5%;">11</td> <td style="width: 5%;">12</td> <td style="width: 5%;">13</td> <td style="width: 5%;">14</td> <td style="width: 5%;">15</td> <td style="width: 5%;">16</td> </tr> </table>															P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
P.O	Week																																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																
<b>References</b>	<p><b>Main :</b></p> <ol style="list-style-type: none"> <li>1. Ruqoyyah Fitri. 2014. Panduan Number Sense Anak Usia Dini. Jakarta: Lentera Ilmu.</li> <li>2. Juanita V. Copley. 2010. The young child and mathematics second edition. Washington, DC: NAEYC</li> <li>3. Jean R. Fieldman. 1991. A survival guide for the preschool teacher. USA: The Centre for Applied Research and Education.</li> <li>4. Eliason, Claudia and Loa Jenkins. 2008. A Practical Guided to Early Childhood Curriculum. USA: Pearson</li> <li>5. Jackman, Hilda L. 2009. Early Education Curriculum 13 A child 19s Connection to the world. USA: Delmar</li> <li>6. Nugraha, Ali. 2003. Pengembangan Sains Pada Anak Usia Dini. Jakarta: Dikti-Depdiknas</li> </ol> <p><b>Supporters:</b></p>																																															
<b>Supporting lecturer</b>	Dra. Mas'udah, M.M.Pd. Sri Widayati, S.Pd., M.Pd. Nur Ika Sari Rakhmawati, 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	Students understand, know about the meaning of mathematics and science in general, the meaning of mathematics for early childhood, the meaning of science for early childhood, the relationship between aud mathematics and aud science	Students are able to answer questions related to the concept of mathematics and science learning material for AUD		Saintifik Lectures, discussions, questions and answers 2 X 50			0%																																									

2	Students are able to create forms of activities to teach the concept of numbers and their operations which are equipped with media as well as compiling assessments in the form of worksheets or in the form of children's activities/performances.	<ol style="list-style-type: none"> <li>1.Students are able to: Develop activities to teach the concept of number</li> <li>2.Arrange activities to teach the concept of counting</li> <li>3.Arrange activities to teach the concepts of comparison and sequence</li> </ol>		Cognitive Collaborative 2 X 50			0%
3	Students are able to create activities to teach the concept of Numbers and their operations which are equipped with media as well as compiling assessments in the form of worksheets or in the form of children's activities/performances.	<ol style="list-style-type: none"> <li>1.Students are able to: Develop activities to teach the concepts of comparison and sequence</li> <li>2.Arrange activities to teach the concepts of addition and subtraction</li> </ol>		Cognitive Collaborative 2 X 50			0%
4	Students are able to create activities to teach the concept of Numbers and their operations which are equipped with media as well as compiling assessments in the form of worksheets or in the form of children's activities/performances.	Students are able to: Develop an assessment of the concept of numbers and their operations in the form of worksheets or in the form of children's activities/performances		Cognitive Collaborative 2 X 50			0%
5	Students are able to create forms of activity to teach the concept of patterns and similarities which are equipped with media as well as compiling assessments in the form of worksheets or in the form of children's activities/performances.	<ol style="list-style-type: none"> <li>1.Students are able to: Develop activities to teach pattern concepts in various contexts</li> <li>2.Arrange activities to teach the concept of similarity</li> </ol>		Cognitive Collaborative 2 X 50			0%
6	Students are able to create forms of activity to teach the concept of patterns and similarities which are equipped with media as well as compiling assessments in the form of worksheets or in the form of children's activities/performances.	Develop an assessment of the concept of patterns and similarities in the form of a worksheet or in the form of children's activities/performance		Cognitive Collaborative 2 X 50			0%
7	Students are able to understand standard mathematics material for aud, design, apply and evaluate the activities they create	<ol style="list-style-type: none"> <li>1.Develop activities to teach shape concepts in various contexts</li> <li>2.Arranging activities to teach geometry in block games</li> <li>3.Develop an assessment of the concept of geometric shapes in the form of worksheets or in the form of children's activities/performances</li> </ol>		Cognitive Collaborative 2 X 50			0%
8	Students are able to create forms of activity to teach the concept of size equipped with media and prepare assessments in the form of worksheets or in the form of children's activities/performances.	<ol style="list-style-type: none"> <li>1.Arrange activities to teach the concept of comparison and order in the concept of size</li> <li>2.Arrange activities to teach the concepts of weight and volume</li> <li>3.Arrange activities to teach the concept of time</li> <li>4.Arrange activities to teach the concept of temperature</li> <li>5.Arrange activities to teach estimation concepts</li> <li>6.Arrange activities to teach money concepts</li> <li>7.Develop an assessment of the concept of size in the form of a worksheet or in the form of children's activities/performance</li> </ol>		Cognitive Collaborative 2 X 50			0%

9	Students are able to work on UTS questions			2 X 50			0%
10	Students are able to understand the importance of learning science in early childhood	<ol style="list-style-type: none"> <li>1.Students are able to: explain the objectives of science learning for children</li> <li>2.explains the value of science for the development of children's cognitive abilities</li> <li>3.explains the value of science for the development of critical thinking and creativity, religious development</li> </ol>		scientific 2 X 50			0%
11	Students are able to understand science material for AUD (biological science, physical science, earth science, life science), create designs, apply and compile assessments in science learning for AUD	<ol style="list-style-type: none"> <li>1.students are able to: understand science material for AUD</li> <li>2.create a science learning plan for AUD</li> <li>3.applying science learning plans for AUD</li> <li>4.preparing assessments in science learning for AUD</li> </ol>		Scientific 2 X 50			0%
12	Students are able to understand science material for AUD (biological science, physical science, earth science, life science), create designs, apply and compile assessments in science learning for AUD	<ol style="list-style-type: none"> <li>1.understand science material for AUD</li> <li>2.create a science learning plan for AUD</li> <li>3.applying science learning plans for AUD</li> <li>4.preparing assessments in science learning for AUD</li> </ol>		scientific 2 X 50			0%
13	Students are able to understand science material for AUD (biological science, physical science, earth science, life science), create designs, apply and compile assessments in science learning for AUD	<ol style="list-style-type: none"> <li>1.students are able to: understand science material for AUD</li> <li>2.create a science learning plan for AUD</li> <li>3.applying science learning plans for AUD</li> <li>4.preparing assessments in science learning for AUD</li> </ol>		Listen to the lecturer's explanation Read literature Discuss the material Create a 2 X 50 product			0%
14	Students are able to understand science material for AUD (biological science, physical science, earth science, life science), create designs, apply and compile assessments in science learning for AUD	<ol style="list-style-type: none"> <li>1.understand science material for AUD</li> <li>2.create a science learning plan for AUD</li> <li>3.applying science learning plans for AUD</li> <li>4.preparing assessments in science learning for AUD</li> </ol>		scientific 2 X 50			0%
15	Students are able to understand science material for AUD (biological science, physical science, earth science, life science), create designs, apply and compile assessments in science learning for AUD	<ol style="list-style-type: none"> <li>1.understand science material for AUD</li> <li>2.create a science learning plan for AUD</li> <li>3.applying science learning plans for AUD</li> <li>4.preparing assessments in science learning for AUD</li> </ol>		scientific 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.