



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																																																																					
Analysis of School Science	8420102005		T=2 P=0 ECTS=3.18	6	July 18, 2024																																																																					
AUTHORIZATION	SP Developer		Course Cluster Coordinator	Study Program Coordinator																																																																						
	Prof. Dr. Erman, M.Pd.																																																																						
Learning model	Project Based Learning																																																																									
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																																									
	PLO-5	Demonstrate scientific, critical, and innovative attitudes in integrated science learning, laboratory activities, and professional-related tasks																																																																								
	PLO-9	Work effectively both individually and in groups, and have entrepreneurial spirit and environmental awareness																																																																								
	PLO-10	Design, implement, and evaluate science learning using ICT																																																																								
	Program Objectives (PO)																																																																									
	PO - 1	Able to analyze various kinds of natural phenomena in each junior high school science topic according to the applicable curriculum.																																																																								
	PO - 2	Able to apply the principles/laws/theories of various natural phenomena in each junior high school science topic in an integrated manner																																																																								
	PLO-PO Matrix																																																																									
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">P.O</td> <td style="padding: 5px;">PLO-5</td> <td style="padding: 5px;">PLO-9</td> <td style="padding: 5px;">PLO-10</td> </tr> <tr> <td style="padding: 5px;">PO-1</td> <td style="width: 40px;"></td> <td style="width: 40px;"></td> <td style="width: 40px;"></td> </tr> <tr> <td style="padding: 5px;">PO-2</td> <td style="width: 40px;"></td> <td style="width: 40px;"></td> <td style="width: 40px;"></td> </tr> </table>				P.O	PLO-5	PLO-9	PLO-10	PO-1				PO-2																																																												
	P.O	PLO-5	PLO-9	PLO-10																																																																						
PO-1																																																																										
PO-2																																																																										
PO Matrix at the end of each learning stage (Sub-PO)																																																																										
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;">1</td><td style="padding: 5px;">2</td><td style="padding: 5px;">3</td><td style="padding: 5px;">4</td><td style="padding: 5px;">5</td><td style="padding: 5px;">6</td><td style="padding: 5px;">7</td><td style="padding: 5px;">8</td><td style="padding: 5px;">9</td><td style="padding: 5px;">10</td><td style="padding: 5px;">11</td><td style="padding: 5px;">12</td><td style="padding: 5px;">13</td><td style="padding: 5px;">14</td><td style="padding: 5px;">15</td><td style="padding: 5px;">16</td> </tr> <tr> <td style="padding: 5px;">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><td></td> </tr> <tr> <td style="padding: 5px;">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><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																	
P.O	Week																																																																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																																										
PO-1																																																																										
PO-2																																																																										
Short Course Description	Analysis of the knowledge dimensions of the SPM Basic Natural Sciences (IPA) Competencies, including potential misconceptions. Lectures are carried out with presentations, discussions and assignments.																																																																									
References	Main :																																																																									
	<ol style="list-style-type: none"> 1. Widodo, W., Rachmadiarti, F., Hidayati, S.N. 2016. Buku Siswa IPA Kelas VII. Jakarta: Kemdikbud. 2. Widodo, W., Rachmadiarti, F., Hidayati, S.N. 2016. Buku Guru IPA Kelas VII. Jakarta: Kemdikbud. 3. Zubaidah, S. 2016. Buku Siswa IPA Kelas VIII. Jakarta: Kemdikbud. 4. Zubaidah, S. 2016. Buku Guru IPA Kelas VIII. Jakarta: Kemdikbud. 5. Zubaidah, S. 2016. Buku Siswa IPA Kelas IX. Jakarta: Kemdikbud. 6. Zubaidah, S. 2016. Buku Guru IPA Kelas IX. Jakarta: Kemdikbud. 7. Giancoli. C Douglas, 1998. Fisika Edisi Kelima Jilid 1. Jakarta: Erlangga 8. Giordano, Nicholas J. 2010. College Physics: Reasoning and Relationship, First Edition. Canada: Nelson Education, Ltd 9. Lucy T pride. 2010. Environmental Chemistry an Introduction Cumming Publishing Company 10. Mc Graww Hill. 2005. The Nature Of Matter. Columbus: United States Of America 11. Silberberg, M.S. 2006. Chemistry: The molecular Nature of Matter and Change fifth edition, Boston: McGrawaHill 																																																																									
	Supporters:																																																																									

Supporting lecturer		Prof.Dr. Wahono Widodo, M.Si. Dr. Mohammad Budiyanto, S.Pd., M.Pd. Laily Rosdiana, S.Pd., M.Pd. Dhita Ayu Permata Sari, 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 (<i>offline</i>)	Online (<i>online</i>)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

1	<p>1. Able to identify the applicable science curriculum in schools</p> <p>2. Able to understand several components contained in the science curriculum at school</p> <p>3. Able to communicate the results of applicable curriculum analysis</p>	<p>1.1. Students can differentiate the concepts of measurement, assessment and evaluation in science learning.</p> <p>2.2. Students can identify the science curriculum in schools that applies in Indonesia</p> <p>3.3. Students understand the components contained in the science curriculum</p>	<p>Criteria: You will get a score of A if: The KD analysis report contains verb analysis and analysis of teaching materials. Analysis of teaching materials contains all the concepts covered in the KD. Every time the quality decreases, the score will decrease.</p> <p>Form of Assessment: Participatory Activities</p>	<p>Students discuss: (1) the science curriculum that applies at school and (2) the components contained in the science curriculum. Students analyze Learning Achievements and develop Learning Objectives and Flow of Middle School Science Learning Objectives. 2 X 50</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 50</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions about school science material (other library sources are used in learning).</p> <p>References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Library: <i>Widodo, W., Rachmadiarti, F., Hidayati, SN 2016. Class VII Science Student Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Reference: <i>Zubaidah, S. 2016. Class VIII Science Teacher's Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Reference: <i>Zubaidah, S. 2016. Class IX Science Student Book. Jakarta: Ministry of Education and Culture.</i></p>	5%
---	---	---	---	---	---	---	----

2	<p>1. Able to identify and relate science concepts according to competency</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p> <p>3. Able to communicate the results of applicable curriculum analysis</p>	<p>1.4. Students are able to identify science concepts according to the competencies in class VII</p> <p>2.5. Students are able to relate several material concepts from the identification results in Class VII</p> <p>3.6. Students are able to analyze misconceptions that may occur regarding science topics at school in class VII</p> <p>4.7. Students are able to design material concept maps according to the competencies in the curriculum in Class VII</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, description of the material, and misconceptions that may arise</p> <p>Form of Assessment: Participatory Activities</p>	<p>Discuss: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compose a concept map with the group 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions about school science material (other library sources are used in learning).</p> <p>References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Library: <i>Widodo, W., Rachmadiarti, F., Hidayati, SN 2016. Class VII Science Student Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Reference: <i>Zubaidah, S. 2016. Class VIII Science Teacher's Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material.</p> <p>Reference: <i>Zubaidah, S. 2016. Class IX Science Student Book. Jakarta: Ministry of Education and Culture.</i></p>	5%
---	--	--	--	---	--	---	----

3	<p>1. Able to identify the applicable science curriculum in schools</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p>	<p>1.4. Students are able to identify science concepts according to the competencies in class VII</p> <p>2.5. Students are able to relate several material concepts from the identification results in Class VII</p> <p>3.6. Students are able to analyze misconceptions that may occur regarding science topics at school in class VII</p> <p>4.7. Students are able to design material concept maps according to the competencies in the curriculum in Class VII</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, description of the material, and misconceptions that may arise</p> <p>Form of Assessment: Participatory Activities</p>	<p>Presentation of discussion results regarding: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compiling a concept map with group 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions about school science material (other library sources are used in learning). References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Library: <i>Widodo, W., Rachmadiarti, F., Hidayati, SN 2016. Class VII Science Student Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: <i>Zubaidah, S. 2016. Class VIII Science Teacher's Book. Jakarta: Ministry of Education and Culture.</i></p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: <i>Zubaidah, S. 2016. Class IX Science Student Book. Jakarta: Ministry of Education and Culture.</i></p>	5%
---	---	--	--	--	--	---	----

4	<p>1. Able to identify and relate science concepts according to competency</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p>	<p>1.8. Students are able to identify science concepts according to the competencies in class VIII</p> <p>2.9. Students are able to relate several material concepts from the identification results in Class VIII</p> <p>3.10. Students are able to analyze misconceptions that may occur regarding science topics at school in class VIII</p> <p>4.11. Students are able to design material concept maps according to the competencies in the curriculum in Class VIII</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, explanation of material according to the scope of KD or more, and possible misconceptions</p> <p>Form of Assessment : Participatory Activities</p>	<p>Presentation of discussion results regarding: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compiling a concept map with the group in Class VIII 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Anggraena, Y., et al. 2022. <i>Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Zubaidah, S. 2016. <i>Class VIII Science Teacher's Book. Jakarta: Ministry of Education and Culture.</i></p>	5%
5	<p>1. Able to identify and relate science concepts according to competency</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p>	<p>1.8. Students are able to identify science concepts according to the competencies in class VIII</p> <p>2.9. Students are able to relate several material concepts from the identification results in Class VIII</p> <p>3.10. Students are able to analyze misconceptions that may occur regarding science topics at school in class VIII</p> <p>4.11. Students are able to design material concept maps according to the competencies in the curriculum in Class VIII</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, explanation of material according to the scope of KD or more, and possible misconceptions</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<p>Presentation of discussion results regarding: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compiling a concept map with the group in Class VIII 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Anggraena, Y., et al. 2022. <i>Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Zubaidah, S. 2016. <i>Class VIII Science Teacher's Book. Jakarta: Ministry of Education and Culture.</i></p>	10%

6	<p>1. Able to identify and relate science concepts according to competency</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p>	<p>1.12. Students are able to identify science concepts according to the competencies in class IX</p> <p>2.13. Students are able to relate several material concepts from the identification results in Class IX</p> <p>3.14. Students are able to analyze misconceptions that may occur regarding science topics at school in class IX</p> <p>4.15. Students are able to design material concept maps according to the competencies in the curriculum in Class IX</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, explanation of material according to the scope of KD or more, and possible misconceptions</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<p>Presentation of discussion results regarding: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compiling a concept map with the group in Class IX 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Anggraena, Y., et al. 2022. <i>Learning and Assessment Guide - Merdeka Curriculum</i>. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Zubaidah, S. 2016. <i>Class IX Science Student Book</i>. Jakarta: Ministry of Education and Culture.</p>	10%
7	<p>1. Able to identify and relate science concepts according to competency</p> <p>2. Able to prepare material concept maps according to competencies in the curriculum</p>	<p>1.12. Students are able to identify science concepts according to the competencies in class IX</p> <p>2.13. Students are able to relate several material concepts from the identification results in Class IX</p> <p>3.14. Students are able to analyze misconceptions that may occur regarding science topics at school in class IX</p> <p>4.15. Students are able to design material concept maps according to the competencies in the curriculum in Class IX</p>	<p>Criteria: You will get an A if your product includes: KD analysis results, explanation of material according to the scope of KD or more, and possible misconceptions</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	<p>Presentation of discussion results regarding: (1) science concepts in the curriculum, (2) possible misconceptions that occur in these concepts based on relevant research articles, (3) inquiry ideas to resolve misconceptions, and (4) compiling a concept map with the group in Class IX 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Anggraena, Y., et al. 2022. <i>Learning and Assessment Guide - Merdeka Curriculum</i>. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</p> <hr/> <p>Material: KD analysis, explanation of material according to KD analysis, and misconceptions in school science material. Reference: Zubaidah, S. 2016. <i>Class IX Science Student Book</i>. Jakarta: Ministry of Education and Culture.</p>	5%

8	-	Sub-CPMK Meetings 1 to 7	Criteria: 1. That's right 100 2. Wrong, according to the degree of error. Form of Assessment : Test	Midterm Exam (UTS) 2 X 50'		Material: - Library:	0%
9	Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum	1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in junior high school 2.17. Students are able to identify inquiry-based learning activities that support competencies in the junior high school curriculum 3.18. Students are able to plan practicum activities that support competencies in the junior high school curriculum 4.19. Students are able to prepare worksheets (LKS/LKPD) according to the junior high school curriculum	Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric Form of Assessment : Participatory Activities	Discuss inquiry-based science learning at junior high school level. Discuss learning activity ideas that can be applied in the form of inquiry-based Student Worksheets (LKPD) to overcome misconceptions in science learning in junior high schools. Students prepare inquiry-based LKPD/LKS individually. 2 X 50'	Asynchronous via LMS Vinesa/Sidia 2 x 60'	Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning). References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i> <hr/> Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: <i>Giancoli. C Douglas, 1998. Physics Fifth Edition Volume 1. Jakarta: Erlangga</i> <hr/> Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reference: <i>Giordano, Nicholas J. 2010. College Physics: Reasoning and Relationship, First Edition. Canada: Nelson Education, Ltd</i> <hr/> Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Library: Mc Graww Hill. 2005. The Nature of Matter. Columbus: United States Of America <hr/> Material: Preparation of inquiry-based LKPD/LKS in junior high	5%

						<p>school science learning. Reader: Silberberg, MS 2006. <i>Chemistry: The molecular Nature of Matter and Change fifth edition, Boston: McGrawaHill</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: Lucy T pride. 2010. <i>Environmental Chemistry an Introduction Cumming Publishing Company</i></p>	
10	<p>Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum</p>	<p>1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in Class VII 2.17. Students are able to identify inquiry-based learning activities that support competencies in the curriculum in Class VII 3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII 4.19. Students are able to prepare worksheets (LKS/LKPD) according to the curriculum in Class VII 5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created</p>	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Participatory Activities</p>	<p>Presentation of: (1) learning activity ideas that can be applied in the form of inquiry-based Student Worksheets (LKPD) to overcome misconceptions in science learning in junior high schools, and (2) LKPD/LKS that have been prepared 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning). References: Anggraena, Y., et al. 2022. <i>Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: Giancoli. C Douglas, 1998. <i>Physics Fifth Edition Volume 1. Jakarta: Erlangga</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reference: Giordano, Nicholas J. 2010. <i>College Physics: Reasoning and Relationship, First Edition. Canada: Nelson Education, Ltd</i></p> <p>Material: Preparation of inquiry-based</p>	5%

						<p>LKPD/LKS in junior high school science learning. Reader: <i>Lucy T pride. 2010. Environmental Chemistry an Introduction Cumming Publishing Company</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Library: <i>Mc Graww Hill. 2005. The Nature of Matter. Columbus: United States Of America</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: <i>Silberberg, MS 2006. Chemistry: The molecular Nature of Matter and Change fifth edition, Boston: McGrawHill</i></p>	
11	<p>Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum</p>	<p>1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in Class VII</p> <p>2.17. Students are able to identify inquiry-based learning activities that support competencies in the curriculum in Class VII</p> <p>3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII</p> <p>4.19. Students are able to prepare worksheets (LKS/LKPD) according to the curriculum in Class VII</p> <p>5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created</p>	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Participatory Activities</p>	<p>Presentation of: (1) learning activity ideas that can be applied in the form of inquiry-based Student Worksheets (LKPD) to overcome misconceptions in science learning in junior high schools, and (2) LKPD/LKS that have been prepared 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning). References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: <i>Giancoli. C Douglas, 1998. Physics Fifth Edition Volume 1. Jakarta: Erlangga</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high</p>	5%

						<p>school science learning. Reference: <i>Giordano, Nicholas J. 2010. College Physics: Reasoning and Relationship, First Edition. Canada: Nelson Education, Ltd</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: <i>Lucy T pride. 2010. Environmental Chemistry an Introduction Cumming Publishing Company</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Library: <i>Mc Graww Hill. 2005. The Nature of Matter. Columbus: United States Of America</i></p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: <i>Silberberg, MS 2006. Chemistry: The molecular Nature of Matter and Change fifth edition, Boston: McGrawaHill</i></p>	
12	<p>Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum</p>	<p>1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in Class VII</p> <p>2.17. Students are able to identify inquiry-based learning activities that support competencies in the curriculum in Class VII</p> <p>3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII</p> <p>4.19. Students are able to prepare</p>	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<p>Students revise inquiry-based worksheets (LKPD/LKS) for science subjects according to the Independent Curriculum for Middle School Level. Students discuss with the lecturer regarding LKPD/LKS which have been prepared and revised according to the results of the discussion. Students try out the revised LKPD/LKS. 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning). References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <p>Material: Preparation of</p>	10%

		worksheets (LKS/LKPD) according to the curriculum in Class VII 5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created				<p>inquiry-based LKPD/LKS in junior high school science learning. Reader: Giancoli. C Douglas, 1998. <i>Physics Fifth Edition Volume 1</i>. Jakarta: Erlangga</p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: Lucy T pride. 2010. <i>Environmental Chemistry an Introduction</i> Cumming Publishing Company</p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reference: Giordano, Nicholas J. 2010. <i>College Physics: Reasoning and Relationship, First Edition</i>. Canada: Nelson Education, Ltd</p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Library: Mc Graww Hill. 2005. <i>The Nature of Matter</i>. Columbus: United States Of America</p> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning. Reader: Silberberg, MS 2006. <i>Chemistry: The molecular Nature of Matter and Change fifth edition</i>, Boston: McGrawaHill</p>	
13	Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum	1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in Class VII 2.17. Students are able to identify inquiry-based learning	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Students revise inquiry-based worksheets (LKPD/LKS) for science subjects according to the Independent Curriculum for Middle School Level. Students discuss with the lecturer regarding	Asynchronous via LMS Vinesa/Sidia 2 x 60'	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning).</p>	10%

		<p>activities that support competencies in the curriculum in Class VII</p> <p>3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII</p> <p>4.19. Students are able to prepare worksheets (LKS/LKPD) according to the curriculum in Class VII</p> <p>5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created</p>	<p>LKPD/LKS which have been prepared and revised according to the results of the discussion. Students try out the revised LKPD/LKS. 2 X 50'</p>	<p>References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p> <hr/> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning.</p> <p>Reader: <i>Giancoli. C Douglas, 1998. Physics Fifth Edition Volume 1. Jakarta: Erlangga</i></p> <hr/> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning.</p> <p>Reader: <i>Lucy T pride. 2010. Environmental Chemistry an Introduction Cumming Publishing Company</i></p> <hr/> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning.</p> <p>Reference: <i>Giordano, Nicholas J. 2010. College Physics: Reasoning and Relationship, First Edition. Canada: Nelson Education, Ltd</i></p> <hr/> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning.</p> <p>Reader: <i>Silberberg, MS 2006. Chemistry: The molecular Nature of Matter and Change fifth edition, Boston: McGrawHill</i></p> <hr/> <p>Material: Preparation of inquiry-based LKPD/LKS in junior high school science learning.</p> <p>Library: <i>Mc Graww Hill. 2005. The Nature of Matter. Columbus:</i></p>
--	--	---	---	---

						<i>United States Of America</i>	
14	Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum	<p>1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in junior high school</p> <p>2.17. Students are able to identify inquiry-based learning activities that support competencies in the S curriculum</p> <p>3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII</p> <p>4.19. Students are able to prepare worksheets (LKS/LKPD) according to the curriculum in Class VII</p> <p>5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created</p>	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	<p>Presentation about LKPD/LKS that has been prepared and created. 2 X 50'</p>	<p>Asynchronous via LMS Vinesa/Sidia: Students provide comments and suggestions on LKPD/LKS created by their classmates in the Discussion feature available on Week 14. 2 x 60'</p>	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning). References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p>	10%

15	Make strategic decisions based on data and information (including the results of input/ideas/ideas from colleagues/references) and provide ideas in selecting practicum activities that are relevant to the curriculum	<p>1.16. Students are able to utilize science and technology used in designing inquiry-based learning activities in Class VII</p> <p>2.17. Students are able to identify inquiry-based learning activities that support competencies in the curriculum in Class VII</p> <p>3.18. Students are able to plan practicum activities that support competencies in the curriculum in Class VII</p> <p>4.19. Students are able to prepare worksheets (LKS/LKPD) according to the curriculum in Class VII</p> <p>5.20. Students are able to carry out experiments according to the Class VII Worksheets (LKS/LKPD) created</p>	<p>Criteria: Accuracy and mastery of knowledge/skills according to the assessment indicators in the assessment rubric</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Presentation about LKPD/LKS that has been prepared and created. 2 X 50'	Asynchronous via LMS Vinesa/Sidia: Students provide comments and suggestions on LKPD/LKS created by their classmates in the Discussion feature available on Week 14. 2 x 60'	<p>Material: KD analysis, explanation of material according to KD analysis, misconceptions in school science material, and inquiry ideas in learning (other library sources are used in learning).</p> <p>References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p>	10%
16	-	SubCPMK Meetings 1 to 15	<p>Criteria: Accuracy and mastery according to the UAS assessment indicators (assessment rubric).</p> <p>Form of Assessment : Test</p>	Final Exam Semester 2 x 50 minutes		<p>Material: Meeting material 1 to 15</p> <p>References: <i>Anggraena, Y., et al. 2022. Learning and Assessment Guide - Merdeka Curriculum. BSNP Ministry of Education, Culture, Research and Technology, Republic of Indonesia: Jakarta.</i></p>	0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	50%
2.	Project Results Assessment / Product Assessment	50%
		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.

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.