



Universitas Negeri Surabaya
Faculty of Mathematics and Natural Sciences
Physics Education Undergraduate Study Program

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
School Curriculum	8420302250	Philosophy and Physics Education Curriculum	T=2	P=0	ECTS=3.18	3	July 17, 2024
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Dra. Suliyannah, M.Si.		Prof. Nadi Suprpto, Ph.D.			Mita Anggaryani, M.Pd., Ph.D.	

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	PLO study program which is charged to the course
	Program Objectives (PO)
PO - 1	Have the ability to utilize ICT-based learning resources and learning media in reviewing the curriculum.
PO - 2	Have knowledge about the development of the school curriculum, the principles of curriculum analysis and master the concepts of PHYSICS and its learning, including misconceptions and strategies for overcoming them.
PO - 3	Have the skills to carry out curriculum analysis to find competency indicators, select material including breadth and depth.
PO - 4	Have the ability to adapt the latest curriculum to the implementation of the curriculum in schools.

PLO-PO Matrix						
	<table border="1" style="margin: 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
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PO-1						
PO-2						
PO-3						
PO-4						

PO Matrix at the end of each learning stage (Sub-PO)																																																																																																						
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Short Course Description	Study of the meaning of curriculum, development of the school curriculum, adaptation of the latest curriculum to curriculum implementation in schools, curriculum analysis which includes task and material analysis, formulation of objectives and indicators of achievement and accommodating inclusive education, essential concepts and learning, misconceptions and coping strategies by utilizing ICT.
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References	<p>Main :</p> <ol style="list-style-type: none"> 1. Goos, M., Stillman, G., Vale, C. 2007. Teaching Secondary School Mathematics Research and Practice for the 21st Century. Australia: Allen & Unwin. 2. Hamdani, Hamid. 2012. Pengembangan Kurikulum Pendidikan. Bandung: Pustaka Setia. 3. Ibrahim, dkk. 2013. Kurikulum Dan Pembelajaran. Jakarta: RajaGrafindo Persada. 4. Sukmadinata, Nana Syaodih. 2013. Pengembangan Kurikulum. Bandung: Remaja Rosdakarya. 5. Yee, Lee Peng. 2006. Teaching Secondary School Mathematics a Resource Book. McGraw-Hill. 6. Dokumen kurikulum yang berlaku dan kurikulum-kurikulum sebelumnya. 7. Buku Guru dan Buku Siswa SMP dan SMA dan yang sederajat Pelajaran IPA dan Fisika 8. Suliyannah, dkk. 2023. Kurikulum Sekolah: Esensi, Pengembangan, Perkembangan, dan Disertai Modul Ajar Fisika SMA. Sidoarjo: PT Mitra Edukasi dan Publikasi <p>Supporters:</p>
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	1. Buku, artikel ilmiah, dan sumber lain yang relevan						
Supporting lecturer	Dra. Suliyannah, M.Si. Dr. Eko Hariyono, S.Pd., M.Pd. Setyo Admoko, S.Pd., M.Pd. Prof. Nadi Suprpto, S.Pd., M.Pd., Ph.D. Utama Alan Deta, S.Pd., M.Pd., M.Si. Muhammad Habibulloh, 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	Understand the meaning, function and role of the school curriculum.	Explain the meaning, function and role of the school curriculum based on the curriculum currently in force and which has previously been in force in Indonesia. Criteria: Qualitative Form: Non-test Type: Theory Method: Lecture, discussion and online question and answer Time: 2 x 50 minutes Understanding, function and role of the school curriculum based on the curriculum that is currently in force or has been in force in Indonesia	Criteria: Qualitative Form of Assessment : Participatory Activities	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Definition, function and role of the school curriculum based on the curriculum currently in force and which has previously been in force in Indonesia. References: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	2%
2	Understand the foundations, components and principles of curriculum development.	1.Explain the basis for curriculum development 2.Explain the components of curriculum development. 3.Explain the principles of curriculum development.	Criteria: Qualitative Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Foundations of curriculum development and components of curriculum development References: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	3%
3	Understanding the development of the school PHYSICS curriculum in Indonesia.	Able to use IT to obtain information to explain the development of the school PHYSICS curriculum in Indonesia	Criteria: Qualitative Form of Assessment : Participatory Activities	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Development of the school PHYSICS curriculum in Indonesia Reference: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	4%

4	Understanding the development of the school PHYSICS curriculum in Indonesia	Able to use IT to obtain information to explain the development of the school PHYSICS curriculum in Indonesia	Criteria: Qualitative Form of Assessment : Participatory Activities	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Development of the school PHYSICS curriculum in Indonesia Reference: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	3%
5	Understand the international school curriculum, especially in Physics subjects	Using IT to obtain information to explain the characteristics of international curricula for Physics subjects, for example Cambridge IGCSE A Level and IB (International Bachelor's Degree)	Criteria: Qualitative Form of Assessment : Participatory Activities	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Cambridge IGCSE A Level and IB Curriculum Literature: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	3%
6	Able to analyze the curriculum, including competency and material analysis	Using IT in analyzing the applicable PHYSICS curriculum, including competency and material analysis.	Criteria: Qualitative Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Curriculum analysis References: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i>	4%

7	Analyzing learning outcomes or minimum competency standards for the applicable SMA/SMK PHYSICS curriculum	Analyzing learning outcomes or minimum competency standards for the applicable SMA/SMK PHYSICS curriculum	Criteria: Qualitative Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: learning outcomes or minimum competency standards for the applicable curriculum (2013 curriculum and independent curriculum) Literature: <i>Applicable curriculum documents and previous curricula.</i> <hr/> Material: Learning outcomes or minimum competency standards for the applicable curriculum. Literature: <i>Applicable curriculum documents and previous curricula.</i>	4%
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8		<ol style="list-style-type: none"> 1.Explain the meaning, function and role of the school curriculum based on the curriculum currently in force and which has previously been in force in Indonesia. 2.Explain the basis for curriculum development. 3.Explain the components of curriculum development. 4.Explain the principles of curriculum development. 5.Able to use IT to obtain information to explain the development of the school PHYSICS curriculum in Indonesia. 6.Using IT to obtain information to explain the characteristics of international curricula for Physics subjects, for example Cambridge IGCSE A Level and IB (International Bachelor's Degree). 7.Able to analyze the applicable curriculum, including competency and material analysis. 8.Analyzing learning outcomes or minimum competency standards for the applicable SMA/SMK PHYSICS curriculum. 	<p>Criteria: Quantitative</p> <p>Form of Assessment : Project Results Assessment / Product Assessment, Test</p>	USS Written Exam 2 x 50 minutes	USS Written Exam 2 x 50 minutes	<p>Material: USS</p> <p>Reader: <i>Suliyannah, et al. 2023. School Curriculum: Essence, Development, and Accompanied by High School Physics Teaching Modules. Sidoarjo: PT Mitra Education and Publication</i></p>	20%
9	Able to formulate PHYSICS competency indicators for SMA/SMK equivalent	Developing PHYSICS competency indicators for SMA/SMK equivalents and accommodating inclusive education	<p>Criteria: Qualitative</p>	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	<p>Material: Preparation of Physics competency indicators for SMA/SMK equivalent.</p> <p>Library: <i>Current curriculum documents and previous curricula.</i></p>	4%

10	Find essential concepts and misconceptions about SMA/SMK and equivalent PHYSICS material	1.Find essential concepts in SMA/SMK PHYSICS material and its learning. 2.Finding misconceptions in SMA/SMK PHYSICS material and solving them.	Criteria: Qualitative Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: SMA/SMK PHYSICS Teaching Materials Library: <i>Teacher's Books and Books for Middle and High School Students and equivalent Science and Physics Lessons</i>	8%
11	Find essential concepts and misconceptions about SMA/SMK and equivalent PHYSICS material	1.Find essential concepts in SMA/SMK PHYSICS material and learning. 2.Finding misconceptions in SMA/SMK PHYSICS material and solving them.	Criteria: Qualitative Form of Assessment : Portfolio Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: SMA/SMK PHYSICS Teaching Materials Library: <i>Teacher's Books and Books for Middle and High School Students and equivalent Science and Physics Lessons</i>	8%
12	Designing teaching modules or learning tools for SMA/SMK Physics or equivalent for a particular Physics topic in accordance with the applicable curriculum	Designing teaching modules or learning tools for SMA/SMK Physics or equivalent for a particular Physics topic in accordance with the applicable curriculum	Criteria: Qualitative Form of Assessment : Project Results Assessment / Product Assessment	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Teaching modules or learning tools for high school/vocational school physics or equivalent. Library: <i>Applicable curriculum documents and previous curricula.</i>	7%
13	Review the latest physics curriculum research from relevant scientific articles	Able to use IT to obtain information related to the latest physics curriculum research from relevant scientific articles	Criteria: Qualitative	Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Project Assignments Lectures, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Latest research studies on the physics curriculum Library: <i>Books, scientific articles and other relevant sources</i>	4%
14	Carrying out mini projects (research) on the Physics Curriculum	Carrying out mini projects (research) on the Physics Curriculum	Criteria: Qualitative Form of Assessment : Project Results Assessment / Product Assessment	2 x 50 minute Project Assignments	2 x 50 minute Project Assignments	Material: Mini Project on the Physics Curriculum Literature: <i>Books, scientific articles and other relevant sources</i>	6%
15	Carrying out mini projects (research) on the Physics Curriculum	Carrying out mini projects (research) on the Physics Curriculum	Criteria: Qualitative Form of Assessment : Assessment of Project Results / Product Assessment, Practices / Performance	2 x 50 minute Project Assignments	2 x 50 minute Project Assignments	Material: Mini Project on the Physics Curriculum Literature: <i>Books, scientific articles and other relevant sources</i>	8%
16	Present scientific articles based on mini projects that have been implemented	Present scientific articles based on mini projects that have been implemented	Criteria: Qualitative Form of Assessment : Project Results Assessment / Product Assessment	Presentations, discussions and questions and answers on lecture topics 2 x 50 minutes	Presentations, discussions and questions and answers on lecture topics 2 x 50 minutes	Material: Mini Project on the Physics Curriculum Literature: <i>Books, scientific articles and other relevant sources</i>	20%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	20.17%
2.	Project Results Assessment / Product Assessment	55.17%
3.	Portfolio Assessment	10.67%
4.	Practice / Performance	4%
5.	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.