



Universitas Negeri Surabaya
Fakultas Matematika dan Ilmu Pengetahuan Alam
Program Studi S1 Pendidikan Fisika

Kode Dokumen

SEMESTER LEARNING PLAN

Course	KODE	Rumpun MataKuliah	Bobot Kredit	SEMESTER	Tanggal Penyusunan																																																
Pengembangan Bahan Ajar	8420302286	Mata Kuliah Wajib Program Studi	T=2 P=0 ECTS=3.18	5	1 Agustus 2023																																																
OTORISASI	Pengembang S.P		Koordinator Rumpun matakuliah	Koordinator Program Studi																																																	
	Dr. Oka Saputra, M.Pd		Prof. Nadi Suprpto, Ph.D	Mita Anggaryani, M.Pd., Ph.D.																																																	
Model Pembelajaran	Project Based Learning																																																				
Program Learning Outcomes (PLO)	PLO program Studi yang dibebankan pada matakuliah																																																				
	Program Objectives (PO)																																																				
	PO - 1	Matakuliah Pengembangan Bahan Ajar mahasiswa mampu merancang, merencanakan dan menyusun bahan ajar Fisika SMA/MA yang inovatif berdasarkan data atau informasi dan pengetahuan pedagogis sesuai pembelajaran abad 21 dengan memanfaatkan sumber belajar berbasis IPTEKS dengan kinerja mandiri dan sikap ilmiah yang baik.																																																			
	Matrik PLO-PO																																																				
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Deskripsi Singkat Mata Kuliah	Mata kuliah Pengembangan bahan ajar mahasiswa mampu merancang, merencanakan dan menyusun bahan ajar Fisika SMA/MA yang inovatif berdasarkan data atau informasi dan pengetahuan pedagogis sesuai pembelajaran abad 21 dengan memanfaatkan sumber belajar berbasis IPTEKS dengan kinerja mandiri dan sikap ilmiah yang baik																																																				
Pustaka	Utama :																																																				
	<ol style="list-style-type: none"> 1. Krathwohl, David R. 2002. A Revision of Bloom's Taxonomy: An Overview . Theory into Practice, (41) 4:212-26 2. Ernawulan Syaodih. 2007. Penilaian Pendidikan Dasar : Diktat perkuliahan Pendidikan Dasar SPs UPI Bandung: Universitas Pendidikan Indonesia. 3. Depdiknas. 2003. Standar Penilaian Buku Pelajaran Pengetahuan Sosial SD-SMP . Pusat Perbukuan Depdiknas. 4. Depdiknas. (2006). Pedoman Memilih dan Menyusun Bahan Ajar . Jakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah. 5. Campbell-Smith, Shandy, dkk. 1994. Penulisan Bahan-Bahan Pelajaran Jakarta: Depdikbud . 6. Wahyudin, Dinn & Kartawinata, Handy. 1998. Penulisan Bahan Ajar . Jakarta: Depdikbud 7. Wijaya, Cece; Dadjuri, Dadjaja & Rusyan, Tabrani. 1990. Upaya Pembaharuan dalam Pendidikan dan Pengajaran . Bandung: Rosdakarya 																																																				
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	<ol style="list-style-type: none"> 1. Kosasih, E. (2021). Pengembangan bahan ajar. Jakarta: Bumi Aksara. 2. Aisya, S. M., & Ishafit, I. (2019). Pengembangan bahan ajar eksperimen fisika berbasis video based laboratory menggunakan wahana permainan taman kanak-kanak pada materi mekanika. Jurnal riset dan kajian pendidikan fisika, 6(1), 35-43. 3. Haryadi, R., & Nurmala, R. (2021). Pengembangan Bahan Ajar Fisika Kontekstual dalam Meningkatkan Motivasi Belajar Siswa. SPEKTRA: Jurnal Kajian Pendidikan Sains, 7(1), 32-39. 																																																				

Dosen Pengampu	Dra. Suliyannah, M.Si. Dr. Titin Sunarti, M.Si. Drs. Imam Suchahyo, M.Si. Mita Anggaryani, M.Pd., Ph.D. Dr. Muhammad Satriawan, M.Pd. Nurita Apridiana Lestari, S.Pd., M.Pd. Muhammad Habibulloh, M.Pd. Dr. Oka Saputra, M.Pd						
Minggu Ke-	Kemampuan akhir tiap tahapan belajar (Sub-PO)	Penilaian		Bentuk Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa, [Estimasi Waktu]		Materi Pembelajaran [Pustaka]	Bobot Penilaian (%)
		Indikator	Kriteria & Bentuk	Luring (offline)	Daring (online)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Mampu menjelaskan prinsip penyusunan bahan ajar	mendeskripsikan prinsip penyusunan bahan ajar	Kriteria: Partisipasi siswa dalam kelas Bentuk Penilaian : Aktifitas Partisipasif	Presentasi, diskusi dan tanya jawab 2 X 50		Materi: Prinsip penyusunan bahan ajar Pustaka: Wahyudin, Dinn & Kartawinata, Handy, 1998. Penulisan Bahan Ajar . Jakarta: Depdikbud	2%
2	Mampu menjelaskan prinsip penyusunan bahan ajar	Menjelaskan prinsip penyusunan bahan ajar	Kriteria: Partisipasi siswa dalam kelas Bentuk Penilaian : Aktifitas Partisipasif	Presentasi, diskusi dan tanya jawab 2 X 50		Materi: Prinsip penyusunan bahan ajar Pustaka: Wahyudin, Dinn & Kartawinata, Handy, 1998. Penulisan Bahan Ajar . Jakarta: Depdikbud	2%
3	Mampu menjelaskan konsep kerangka pengembangan bahan ajar	Menjelaskan konsep kerangka pengembangan bahan ajar	Kriteria: Partisipasi siswa dalam kelas Bentuk Penilaian : Aktifitas Partisipasif	Presentasi, diskusi dan tanya jawab 2 X 50		Materi: Konsep kerangka pengembangan bahan ajar Pustaka: Depdiknas. (2006). Pedoman Memilih dan Menyusun Bahan Ajar . Jakarta: Direktorat Jenderal Pendidikan Dasar dan Menengah.	2%
4	Mampu menjelaskan prinsip dasar pedagogi materi subjek	menjelaskan prinsip dasar pedagogi materi subjek	Kriteria: Partisipasi siswa dalam kelas Bentuk Penilaian : Aktifitas Partisipasif	Presentasi, diskusi dan tanya jawab 2 X 50		Materi: Pedagogi materi subjek Pustaka: Wahyudin, Dinn & Kartawinata, Handy, 1998. Penulisan Bahan Ajar . Jakarta: Depdikbud	2%

5	Mampu menjelaskan struktur pengetahuan dan disiplin keilmuan yang mendasari pengetahuan bahan ajar	Explain the knowledge structure and scientific disciplines that underlie knowledge of teaching materials	Criteria: Student participation in class Form of Assessment : Participatory Activities	Presentation, discussion and questions and answers 2 X 50		Material: Principles of preparing teaching materials Reader: <i>Wijaya, Cece; Djadjuri, Djadja & Rusyan, Tabrani. 1990. Reform Efforts in Education and Teaching. Bandung: Rosdakarya</i> Material: Basics for developing teaching materials Reader: <i>Wijaya, Cece; Djadjuri, Djadja & Rusyan, Tabrani. 1990. Reform Efforts in Education and Teaching. Bandung: Rosdakarya</i>	2%
6	Able to explain the scientific disciplines that underlie knowledge of teaching materials	Explain the scientific disciplines that underlie knowledge of teaching materials	Criteria: Student participation in class Form of Assessment : Participatory Activities	Presentation, discussion and questions and answers 2 X 50		Material: Principles of preparing teaching materials Reader: <i>Wijaya, Cece; Djadjuri, Djadja & Rusyan, Tabrani. 1990. Reform Efforts in Education and Teaching. Bandung: Rosdakarya</i> Material: Basics for developing teaching materials Reader: <i>Wijaya, Cece; Djadjuri, Djadja & Rusyan, Tabrani. 1990. Reform Efforts in Education and Teaching. Bandung: Rosdakarya</i>	2%
7	Able to analyze discourse in a teaching material	Analyzing discourse in a teaching material	Criteria: Student participation in class Form of Assessment : Participatory Activities	Presentation, discussion and questions and answers 2 X 50		Material: Discourse analysis Literature: <i>Wahyudin, Dinn & Kartawinata, Handy. 1998. Writing Teaching Materials. Jakarta: Department of Education and Culture</i>	4%

8	Able to develop a framework for teaching materials	<p>1. Able to produce concept maps</p> <p>2. Able to produce the macro structure of teaching materials</p>	<p>Criteria: Design concept maps and macro structures</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Midterm Exam 2 X 50		<p>Material: Macro structure</p> <p>Reference: <i>Ministry of National Education. (2006). Guidelines for Selecting and Preparing Teaching Materials. Jakarta: Directorate General of Primary and Secondary Education.</i></p>	20%
9	Able to develop teaching materials that suit the characteristics of students and the scientific value of teaching materials	Able to prepare innovative SMA/MA Physics teaching materials based on data or information and pedagogical knowledge according to 21st century learning by utilizing science and technology-based learning resources with independent performance and good scientific attitudes	<p>Criteria: Developing textbooks that have been designed</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	Project Based Learning (PjBL) 2 X 50	2 x 50'	<p>Material: Development of contextual-based teaching materials</p> <p>Reference: <i>Haryadi, R., & Nurmala, R. (2021). Development of Contextual Physics Teaching Materials to Increase Student Learning Motivation. SPECTRA: Journal of Science Education Studies, 7(1), 32-39.</i></p> <hr/> <p>Material: Development of teaching materials</p> <p>Reference: <i>Kosasih, E. (2021). Development of teaching materials. Jakarta: Bumi Literacy.</i></p>	5%

10	<p>Able to prepare innovative SMA/MA Physics teaching materials based on data or information and pedagogical knowledge according to 21st century learning by utilizing science and technology-based learning resources with independent performance and good scientific attitudes</p>	<p>Develop teaching materials that suit the characteristics of students and the scientific value of teaching materials</p>	<p>Criteria: Developing textbooks that have been designed</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<p>Project Based Learning (PjBL) 2 X 50</p>	<p>2 x 50'</p>	<p>Material: Development of contextual-based teaching materials</p> <p>Reference: <i>Haryadi, R., & Nurmala, R. (2021). Development of Contextual Physics Teaching Materials to Increase Student Learning Motivation. SPECTRA: Journal of Science Education Studies, 7(1), 32-39.</i></p> <hr/> <p>Material: Development of teaching materials</p> <p>Reference: <i>Kosasih, E. (2021). Development of teaching materials. Jakarta: Bumi Literacy.</i></p>	5%
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14	<p>Able to prepare innovative SMA/MA Physics teaching materials based on data or information and pedagogical knowledge according to 21st century learning by utilizing science and technology-based learning resources with independent performance and good scientific attitudes</p>	<p>Develop teaching materials that suit the characteristics of students and the scientific value of teaching materials</p>	<p>Criteria: Developing textbooks that have been designed</p> <p>Form of Assessment : Participatory Activities, Project Results Assessment / Product Assessment</p>	<p>Project Based Learning (PjBL) 2 X 50</p>	<p>2 x 50'</p>	<p>Material: Development of contextual-based teaching materials</p> <p>Reference: <i>Haryadi, R., & Nurmala, R. (2021). Development of Contextual Physics Teaching Materials to Increase Student Learning Motivation. SPECTRA: Journal of Science Education Studies, 7(1), 32-39.</i></p> <hr/> <p>Material: Development of teaching materials</p> <p>Reference: <i>Kosasih, E. (2021). Development of teaching materials. Jakarta: Bumi Literacy.</i></p>	5%
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16	Able to prepare innovative SMA/MA Physics teaching materials based on data or information and pedagogical knowledge according to 21st century learning by utilizing science and technology-based learning resources with independent performance and good scientific attitudes	Produce teaching materials that suit the characteristics of students and the scientific value of teaching materials	Criteria: Developing textbooks that have been designed Form of Assessment : Project Results Assessment / Product Assessment	Final Exam Semester 2 X 50	2 x 50'	Material: Development of contextual-based teaching materials Reference: <i>Haryadi, R., & Nurmalia, R. (2021). Development of Contextual Physics Teaching Materials to Increase Student Learning Motivation. SPECTRA: Journal of Science Education Studies, 7(1), 32-39.</i> Material: Development of teaching materials Reference: <i>Kosasih, E. (2021). Development of teaching materials. Jakarta: Bumi Literacy.</i>	29%
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Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	33.5%
2.	Project Results Assessment / Product Assessment	66.5%
		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** 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.**

