



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
Audiovisual Physics	8420302252	Study Program Elective Courses	T=2	P=0	ECTS=3.18	6	August 16, 2023
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	Abd. Kholiq, S.Pd., M.T.		Abd. Kholiq, S.Pd., M.T.			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 describe audio visual media.									
	PO - 2	Have the ability to study audio-visual media									
	PO - 3	Have the ability to describe the development of audio-visual based Physics Learning Media equipment									
	PO - 4	Students are able to analyze the physics concepts that underlie the working principles of Audio-Visual Media Equipment (Camera Working Principles)									
	PO - 5	Have the ability to describe preparations for making Audio-Visual Media									
	PO - 6	Have the ability to design Audio-Visual Media Scenarios									
	PO - 7	Have the ability to use Audio-Visual Media Equipment									
	PO - 8	Have the ability to develop audio-visual media (writing video scenarios and shooting videos)									
	PO - 9	Have the ability to develop Audio-Visual Media by applying video editing									
	PLO-PO Matrix										
	<table border="1" style="margin-left: auto; margin-right: 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> <tr><td>PO-5</td></tr> <tr><td>PO-6</td></tr> <tr><td>PO-7</td></tr> <tr><td>PO-8</td></tr> <tr><td>PO-9</td></tr> </table>	P.O	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9
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PO-1											
PO-2											
PO-3											
PO-4											
PO-5											
PO-6											
PO-7											
PO-8											
PO-9											

PO Matrix at the end of each learning stage (Sub-PO)

	<table border="1"> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> <tr> <td>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> </tr> <tr> <td>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> </tr> <tr> <td>PO-3</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>PO-4</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>PO-5</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>PO-6</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>PO-7</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>PO-8</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>PO-9</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																PO-3																PO-4																PO-5																PO-6																PO-7																PO-8																PO-9															
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Short Course Description This course is a course that develops knowledge and skills related to the development of Physics learning videos which include the development of audiovisual media, shooting and editing techniques, and cinematography theory. This course is a means for students' self-development in being creative in combining Physics knowledge and communication skills in the form of audiovisual media. Students are expected to be critical, creative and active while taking this course.

References

Main :

- Bucchi, M. and Trench, B. eds., 2021. Routledge handbook of public communication of science and technology. Routledge.
- Dale, E., 1969. Audiovisual methods in teaching.
- Cruse, E., 2006. Using educational video in the classroom: Theory, research and practice. Library Video Company, 12(4), pp.56-80
- Fischhoff, B. and Scheufele, D.A., 2013. The science of science communication. Proceedings of the National Academy of Sciences, 110(Supplement 3), pp.14031-14032.
- Kubovy, M. and Schutz, M., 2010. Audio-visual objects. Review of Philosophy and Psychology, 1(1), pp.41-61.
- Welbourne, D.J. and Grant, W.J., 2016. Science communication on YouTube: Factors that affect channel and video popularity. Public understanding of science, 25(6), pp.706-718.

Supporters:

- Teknik Camera Movement Menggunakan Smartphone. <https://idseducation.com/7- teknik-camera-movement/>
- Tehnik Videografi. <https://kumparan.com/seputar-hobi/videografi-pengertianmacam-dan-tekniknya-20xuMbxCNFd>
- Teknik Perekaman Sinematik untuk Video yang Lebih Menarik. <https://www.pixel.web.id/teknik-perekaman-sinematik/>
- GoenRock. (2016, Juni 26). Tutorial Videografi #1: Memilih Lensa Untuk Filmmaking [Video]. Youtube. https://www.youtube.com/watch?v=TOMtDtJVfGE&list=PLX_3lc1zF0DlzqsSfaWtMS4q06ZJs3Ntf&inde x=22
- GoenRock. (2016, Juli 5). Tutorial Videografi #2: Camera Movements [Video]. Youtube. https://www.youtube.com/watch?v=Nr5EDoec7xg&list=PLX_3lc1zF0DlzqsSfaWtMS4q06ZJs3Ntf&inde x=20 140
- GoenRock. (2016, September 8). Tutorial Videografi #3: Shot Types, Camera Angles & Rules of Framing [Video]. Youtube. https://www.youtube.com/watch?v=F_jxAuBTAr8&list=PLX_3lc1zF0DlzqsSfaWtMS4q06ZJs3Ntf&inde x=19

Supporting lecturer Drs. Imam Sucahyo, M.Si.
Abd. Kholiq, S.Pd., M.T.
Mita Anggaryani, M.Pd., Ph.D.
Dr. Muhammad Satriawan, M.Pd.
Muhammad Habibulloh, M.Pd.
Dr. Oka Saputra, 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	1.Describe audiovisual media 2.Examining Audio Video Based Physics Learning Media	1.Students are able to describe audiovisual media 2.Students are able to study audio video-based physics learning media	Form of Assessment : Participatory Activities, Portfolio Assessment	Presentation, Discussion and questions and answers 2 X 50			2%

2	Have the ability to describe the development of Audio-Visual Media Equipment (Camera Development)	Have the ability to describe the development of Audio-Visual Media Equipment (Camera Development)	Form of Assessment : Participatory Activities, Portfolio Assessment	Assignment 2 X 50			2%
3	Students are able to analyze the physics concepts that underlie the working principles of Audio-Visual Media Equipment (Camera Working Principles)	Students are able to analyze the physics concepts that underlie the working principles of Audio-Visual Media Equipment (Camera Working Principles)	Form of Assessment : Participatory Activities	Presentation and Discussion 2 X 50			5%
4	<ol style="list-style-type: none"> 1. Have the ability to describe preparations for making Audio-Visual Media 2. Have the ability to design Audio-Visual Media Scenarios 3. Have the ability to use Audio-Visual Media Equipment 	Have the ability to describe preparations for making Audio-Visual Media	Form of Assessment : Participatory Activities	Assignment 2 X 50			2%
5	<ol style="list-style-type: none"> 1. Have the ability to describe preparations for making Audio-Visual Media 2. Have the ability to design Audio-Visual Media Scenarios 3. Have the ability to use Audio-Visual Media Equipment 	Have the ability to describe preparations for making Audio-Visual Media	Form of Assessment : Participatory Activities	Assignment 2 X 50			3%
6	<ol style="list-style-type: none"> 1. Have the ability to describe preparations for making Audio-Visual Media 2. Have the ability to design Audio-Visual Media Scenarios 3. Have the ability to use Audio-Visual Media Equipment 	Have the ability to describe preparations for making Audio-Visual Media	Forms of Assessment : Participatory Activities, Portfolio Assessment, Practice / Performance	Assignment 2 X 50			3%

7	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Project Based Learning (PjBL) Project 1: Developing Video Scenarios & Shooting Videos with Themes: 1. Daily of Physics 2. SDGs 3. Physics Learning 2 X 50			10%
8	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Project Based Learning (PjBL) Project 1: Developing Video Scenarios & Shooting Videos with Themes: 1. Daily of Physics 2. SDGs 3. Physics Learning 2 X 50			10%
9	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Students are able to develop audio-visual media by applying video scenario writing techniques and video shooting techniques	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Project Based Learning (PjBL) Project 1: Developing Video Scenarios & Shooting Videos with Themes: 1. Daily of Physics 2. SDGs 3. Physics Learning 2 X 50			10%
10	Have the ability to study Audio-Visual Media by applying video editing	Have the ability to develop Audio-Visual Media by applying video editing	Form of Assessment : Participatory Activities	Discussion 2 X 50			1%
11	Have the ability to study Audio-Visual Media by applying video editing	Have the ability to develop Audio-Visual Media by applying video editing	Form of Assessment : Participatory Activities	Discussion 2 X 50			2%

12	Students are able to develop audio-visual media by applying video editing	Students are able to develop audio-visual media by applying video editing	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Case Method Project 2: Audio-Visual Media Development by applying video editing and display design Based on the video image scenario obtained in Project 1 2 X 50			10%
13	Students are able to develop audio-visual media by applying video editing	Students are able to develop audio-visual media by applying video editing	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Case Method Project 2: Audio-Visual Media Development by applying video editing and display design Based on the video image scenario obtained in Project 1 2 X 50			10%
14	Students are able to develop audio-visual media by applying video editing	Students are able to develop audio-visual media by applying video editing	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Case Method Project 2: Audio-Visual Media Development by applying video editing and display design Based on the video image scenario obtained in Project 1 2 X 50			10%
15	Students are able to develop audio-visual media by applying video editing	Students are able to develop audio-visual media by applying video editing	Form of Assessment : Project Results Assessment / Product Assessment	<input type="checkbox"/> Learning Form: Offline lecture <input type="checkbox"/> Learning Method: Case Method Project 2: Audio-Visual Media Development by applying video editing and display design Based on the video image scenario obtained in Project 1 2 X 50			10%

16	End of Semester Evaluation (Publication and assessment of Project 2)	End of Semester Evaluation (Publication and assessment of Project 2)	Form of Assessment : Project Results Assessment / Product Assessment				10%
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Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	16%
2.	Project Results Assessment / Product Assessment	80%
3.	Portfolio Assessment	3%
4.	Practice / Performance	1%
		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.
- Forms of assessment:** test and non-test.
- 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.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.