

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

Document Code

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Courses				CODE				C	Course Family					C	Credit Weight				SEI	IEST	ER	Co Dat	npila e	tion		
Seminar				8420302184						T			=2	P=0	EC	TS=3	.18		6		July	/ 17, 2	2024			
AUTHOR	RIZAT	ION		SP De	veloper								Co	urse	Clus	ster	Coo	rdina	tor		Stu	dy P	rogra	am		
															Mita Anggaryani, M.Pd., Ph.D.											
Learning model	I	Case Studies																								
Program	n	PLO study program which is charged to the course																								
Learning	g es	Program Objectives (PO)																								
(PLO)		PLO-PO Matr	ix																							
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Short Course Descript	tion	The Colloquium studies physics papers written Colloquium pap	n for Ph s educa must pers is r	nysics Ec ation rese contain research	lucation earch top basic eo that is re	Study pics wi ducatio elevant	Progr hich v nal p t to pre	ram str vill beo vrincipl oblem:	udent come es ar s in P	s is refe nd tl hysi	a res erenc heori cs le	searc es fo es, a arnin	ch de or th and ng ar	esign esis Phys nd Ph	dev rese sics iysic	velop earcl ma s le	omen n in 1 terial arnin	it cou the fo for g inn	rse b orm c scho ovatio	efore f a li ols.	the tera The	thes ture s focu	is. T searc s of	he C :h. C disc	Colloqi Colloqi Cussio	uium uium n of
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	ŀ	Supporters:																								
Support lecturer	ting	Prof. Dr. Budi J Dra. Suliyanah, Dr. Titin Sunart Drs. Imam Suc: Dr. Dwikoranto, Prof. Dr. Wasis Woro Setyarsih Dr. Eko Hariyor Setyo Admoko, Abd. Kholig, S.I Abu Zainuddin, Prof. Nadi Supp Mita Anggaryar Mukhayyarotin Nurita Apridiana. Utama Alan De Dr. Binar Kurnia	latmiko, , M.Si. , M.Si. ahyo, M. , M.Pd. , M.Si. , S.Pd., N.S.Pd., S.Pd., M. S.Pd., M. S.Pd., M. S.Pd., M. S.Pd., S.Pd., rapto, S. Niswati a Lesta tta, S.Pr a Praha	, M.Pd. , M.Si. d., M.Pd M.Pd. T. M.Pd. S.Pd., M.I J., Ph.D. i Rodliya rri, S.Pd. d., M.Pd ani, S.Pd	Pd., Ph.[ tul Jauha M.Pd. , M.Si. , M.Pd.	D. ariyah,	S.Pd.	., M.Pc	d.																	
Week-		nal abilities of ch learning age			Eval	uation							Le Stu	Help earni dent <mark>Esti</mark>	) Lea ng r Ass <mark>mat</mark>	Learning, Ig methods, Assignments, nated time]					Le ma	arnii ateria	ng als	As: W	sessn eight	nent (%)
	(Sul	(Sub-PO)		Indicate	or	С	riteria	a & Fo	orm		Offli	ne (	offli	ne)		0	nline	( on	line )		Rei	]				
(1)		(2)		(3)				(4)				(5	<b>5</b> )					(6)				(7)			(8)	

1	Understand the techniques for preparing a scientific work	1. Explain the meaning of scientific work. 2. Explain the components of scientific work	Form of Assessment : Participatory Activities	Presentation and discussion 2 X 50		5%
2	Able to search library materials	<ol> <li>Explain the types of library materials</li> <li>Able to search for library sources</li> </ol>	Criteria: 1.The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) Form of Assessment : Participatory Activities	Presentation and discussion 2 X 50		5%
3	Able to search library materials	<ol> <li>Explain the types of library materials</li> <li>Able to search for library sources</li> </ol>	Criteria: 1.The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) Form of Assessment : Participatory Activities	Presentation and discussion 2 X 50		5%
4	Able to search library materials	<ol> <li>Explain the types of library materials</li> <li>Able to search for library sources</li> </ol>	Criteria: 1.The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) 3.3. Assessment of structured assignments and seminar papers or draft proposals, then given weights (3) Form of Assessment : Portfolio Assessment	Presentation and discussion 2 X 50		5%
5	Able to search library materials	<ol> <li>Explain the types of library materials</li> <li>Able to search for library sources</li> </ol>	Criteria: 1. The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) 3.3. Assessment of structured assignments and seminar papers or draft proposals, then given weights (3) Form of Assessment	Presentation and discussion 2 X 50		5%

6	Able to prepare the introductory part of a research proposal	1. Able to prepare the background of the problem 2. Able to formulate the problem 3. Able to formulate research objectives 4. Able to formulate the benefits of research 5. Able to formulate operational definitions 6. Able to formulate research assumptions and limitations	Criteria: 1.The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) 3.3. Assessment of structured assignments and seminar papers or draft proposals, then given weights (3) Form of Assessment Participatory Activities, Portfolio Assessment	2 X 50		5%
7	Able to prepare the literature review section of a research proposal	1. Able to compile theoretical studies supporting research 2. Able to compile relevant research results 3. Able to develop a framework for thinking	Form of Assessment : Participatory Activities, Portfolio Assessment	Discussions, presentations and consultations 2 X 50		5%
8	UTS. Presentation of background, literature review, and framework		Form of Assessment : Practice / Performance	2 X 50		10%
9	Developing research methodology	Develop a research methodology according to the problem posed	Form of Assessment : Portfolio Assessment	Discussion, Mentoring 2 X 50		5%
10	Developing research methodology	Develop a research methodology according to the problem posed	Form of Assessment : Portfolio Assessment	Discussion, Mentoring 2 X 50		5%
11	Developing research methodology	Develop a research methodology according to the problem posed	Form of Assessment : Portfolio Assessment	Discussion, Mentoring 2 X 50		5%
12	Understand research instruments	Students can prepare research instruments	Form of Assessment : Practice / Performance	Assistance 2 X 50		5%
13	Understand research instruments	Students can prepare research instruments	Form of Assessment : Practice / Performance	Assistance 2 X 50		5%
14	Understand how to analyze research data	Calculating/analyzing research data	Criteria: 1.The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) Form of Assessment : Portfolio Assessment	Mentoring/workshop 2 X 50		5%

15	Understand how to analyze research data	Calculating/analyzing research data	Criteria: 1. The assessment is carried out on the following aspects: 2.1. Participation in lectures and seminar paper presentations (weight 2) 3.3. Assessment of structured assignments and seminar papers or draft proposals, then given weights (3) Form of Assessment, Practice / Performance	Mentoring/workshop 2 X 50		5%
16			Criteria: The final semester exam (UAS) is used to measure presentation skills and defend seminar papers or research proposal drafts and the results are given a weight of 5. Form of Assessment Project Results Assessment / Product Assessment	Mentoring/workshop 2 X 50		20%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	20%
2.	Project Results Assessment / Product Assessment	20%
3.	Portfolio Assessment	37.5%
4.	Practice / Performance	22.5%
		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.