

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

Document Code

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Courses				CODE				Cour	se Fan	nily	Cr	edit W	/eight		SEM	IESTER	Comp	pilation
Disaster	mitiç	jation		842030	2261						T=	2 P=	0 EC	TS=3.18		0	July 1	L8, 2024
AUTHOR	IZAT	ION		SP Developer			Cou	rse C	Cluste	r Coor	dinator		ly Progra rdinator	am				
		-								Mita Anggaryani, M.Pd., Ph.D.		M.Pd.,						
Learning model		Case Studies																
Program Learning		PLO study program which is charged to the course																
Outcomes (PLO)	Program Objectives (PO)																	
	PLO-PO Matrix																	
				P.O														
		PO Matrix at the end of each learning stage (Sub-PO)																
			P.C)						١	Week							
				1	2	3 4	5	6	7	8	9	10	11	12	13	14 1	15	16
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Short Course Descript	tion	This course examinatural disasters volcanism disaster analysis of social mastering concepts.	, non-na er mitigat al disaste	tural dis ion analy er mitiga	asters, ysis, tec ition. Le	analysis hnologic ectures	of po al disa are ca	tential ster m rried o	disas itigatio ut usi	ers in n anal ng dis	Indo ysis, o cussi	nesia, disaste ons a	clima er mition nd exp	tological gation and positories	disasi alysis as w	ter mitiga disease (ation a outbrea	analysis, aks, and
Referen	ces	Main :																
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		Supporters:																
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Supporting lecturer		Mukhayyarotin Niswati R Dr. Binar Kurnia Prahani		odliyatul Jauhariyah, S.Pd., M.Pd. , S.Pd., M.Pd.								I						
week- sta		nal abilities of ch learning age ub-PO)		Evaluation			000	Help Learning, Learning methods, Student Assignments, [Estimated time]			ma	arning terials [erences		essment ght (%)				
			II	ndicato		Crite	ria & F	orm		line (line)		Onlin	ie (on	iine)		1		
(1)		(2)		(3)			(4)			(5)			(6)			(7)		(8)

1	Describe the concept of disaster. Describe the elements that trigger disasters; Analyze data and facts about disasters in Indonesia.	1.Students are able to describe the concept of disaster. 2.Students are able to describe the elements that trigger disasters. 3.Students are able to analyze disaster data and facts in Indonesia. 4.Students are able to explain the history of disasters in the past.	Criteria: 1.4 - Very Good 2.3 - OK 3.2 - Fairly Good 4.1 - Not Good	Discussion and assignment 2 X 50		0%
2	Classifying disasters based on their causes. Analyzing disasters based on the Sendai framework.	1.Students are able to classify disasters according to the Book of Disaster Management. 2.Students are able to classify disasters based on their causes. 3.Students are able to analyze disasters based on the Sendai framework. 4.Students are able to analyze the dominance of disasters in Indonesia.	Criteria: 1.4 = Very Good 2.3 = Good 3.2 = Fairly Good 4.1 = Not Good	Class discussion and assignment 2 X 50		0%
3	Demonstrate knowledge of the concepts of Geology, Geomorphology, Disaster Climatology.	1.Students are able to demonstrate knowledge of the concept of Geological Disasters. 2.Students are able to demonstrate knowledge of the concept of Geomorphological Disasters. 3.Students are able to demonstrate knowledge of the concept of Climatological Disasters.	Criteria: 1.4 = Very Good 2.3 = Good 3.2 = Fairly Good 4.1 = Not Good	Class Discussion and Assignment 2 X 50		0%

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4	Demonstrate knowledge of the	1.Students are able	Criteria:	Class		0%
	characteristics of	to demonstrate	1.4 = Very Good	discussion		
	natural disasters.	knowledge about	2.3 = Good	and expository		
	Identify signs of	the characteristics	3.2 = Fairly	2 X 50	Į.	
	impending natural disasters. Analyze	of natural	Good	2 7 30	Į.	
	disaster response	disasters such as	4.1 = Not Good		Į.	
	actions according	earthquakes,			Į.	
	to the	tsunamis,			Į.	
	characteristics of	volcanic				
	natural disasters.	eruptions,			Į.	
	Analyze the impact of natural disasters.	landslides, floods			Į.	
	Describe how to	and flash floods.			Į.	
	recover	2.Students are able				
	(rehabilitate) after	to identify signs of			Į.	
	natural disasters.	impending natural				
		disasters:				
		Earthquakes,			Į.	
		Tsunamis,			Į.	
		Volcanic				
		Eruptions,			Į.	
		Landslides,			Į.	
		Floods, Flash				
		Floods, Droughts,			Į.	
		Extreme Weather				
		(tornadoes), and				
		Extreme Waves				
		(abrasion).				
		3.Students are able				
		to analyze				
		disaster response				
		actions according			Į.	
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		characteristics of				
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		such as				
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		landslides, floods				
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		droughts, extreme				
		weather				
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		4.Students are able				
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		extreme waves				
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		5.Students are able				
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		such as				
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(abrasion).			extreme waves					
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6	Demonstrate	1.Students are able	Criteria:	Class			0%
	knowledge of the	to demonstrate	1.4 = Very Good	discussion			
1	characteristics of	knowledge about	2.3 = Good	and			
	natural disasters. Identify signs of	the characteristics	3.2 = Fairly	expository			
	impending natural	of natural	Good	2 X 50			
	disasters. Analyze	disasters such as	4.1 = Not Good				
	disaster response		4.1 - NOL GOOD				
	actions according	earthquakes,					
	to the	tsunamis,					
	characteristics of	volcanic					
	natural disasters.	eruptions,					
	Analyze the impact of natural disasters.	landslides, floods					
	Describe how to	and flash floods.					
	recover	2.Students are able					
	(rehabilitate) after	to identify signs of					
	natural disasters.	impending natural					
		disasters:					
		Earthquakes,					
		Tsunamis,					
		Volcanic					
		Eruptions,					
		Landslides,					
		Floods, Flash					
		Floods, Droughts,					
		Extreme Weather					
		(tornadoes), and					
		Extreme Waves					
		(abrasion).					
		3.Students are able					
		to analyze					
		disaster response					
		actions according					
		to the					
		characteristics of					
		natural disasters					
		such as					
		earthquakes,					
		tsunamis,					
		volcanic					
		eruptions,					
		landslides, floods					
		and flash floods,					
		droughts, extreme					
		weather					
		(tornadoes), and					
		extreme waves					
		(abrasion).					
		4.Students are able					
		to analyze the					
		impact of natural					
		disasters such as					
		earthquakes,					
		tsunamis,					
		volcanic					
		eruptions,					
		landslides, floods					
		and flash floods,					
		droughts, extreme					
		weather					
		(tornadoes), and					
		extreme waves					
		(abrasion).					
		Students are able					
		to describe how to					
		recover					
		(rehabilitate) after					
		natural disasters					
		such as					
		earthquakes,					
		tsunamis,					
		·					
		volcanic					
		eruptions,					
		landslides, floods					
		and flash floods,					
		droughts, extreme					
		weather					
		(tornadoes), and					
		extreme waves					
		(abrasion).					
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7 Demonstrate he characteristics of non-natural disasters. Analyze additions according to the characteristics of non-natural disasters. Page of the low to (prehabilitate) after non-natural disasters. Describe how to (prehabilitate) after non-natural disasters. Suddents are able to thereby a characteristics of non-natural disasters. Suddents are able to the chiracteristics of non-natural disasters. Suddents are able to the chiracteristics of non-natural disasters and chiracteristics of non-natural disasters. Suddents are able to the chiracteristics of non-natural disasters in the form of chiracteristics of non-natural disasters in the form of the chiracteristics of non-natural disasters in the form of the chiracteristics of non-natural disasters in the form of the chiracteristics of non-natural disasters in the form of the chiracteristics of non-natural disasters in the form of the chiracteristics of non-natural disasters in the form of failures as well as epidemics and disease outbreaks. 5. Suddents are able to control the chiracteristics of non-natural disasters in the form of failures as well as epidemics and disease outbreaks. 5. Suddents are able to control the form of failures as well as epidemics and disease outbreaks. 5. Suddents are able to control the form of failures as well as epidemics and disease outbreaks. 6 UTS 1. Describe the control of the co				T	1	ı	ı	1
signs of impending non-natural disasters response actions according of the characteristics of non-natural disasters. Analyze disaster response actions according of characteristics of non-natural disasters. Analyze disasters in the characteristics of non-natural disasters. Describe how to (chabilitate) after non-natural disasters. The characteristics of non-natural disasters. Analyze disasters in the common of the characteristics of non-natural disasters. Analyze disasters in the characteristics of non-natural disasters in the characteristics of non-nat	7		1.Students are able					0%
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disasters. Identify signs of impending disasters. Analyze disaster response of the content of th			knowledge about					
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disasters. Analyze disaster response disasters. Analyze the impact of non- natural disasters. disas		signs of impending	of non-natural					
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Information Systems (GIS). 2.Describe the benefits and scope of GIS,		physically.		3.2=fairly good				
Systems (GIS). 2.Describe the benefits and scope of GIS,					2 X 50			
2.Describe the benefits and scope of GIS,								
benefits and scope of GIS,								
scope of GIS,								
J.Anaiyzing Gio			3.Analyzing GIS					
data for mapping								
the distribution of								
potential disaster								
areas.			•					
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10	Analyzing GIS data to map disaster-prone areas. Predicting the potential for disasters in several regions of Indonesia	1.Students are able to plan and process GIS data. 2.Students are able to analyze GIS data to map disaster-prone areas. 3.Students are able to predict potential disasters in several regions in Indonesia using GIS data.	Criteria: 1.4 = Very Good 2.3 = Good 3.2 = Fairly Good 4.1 = Not Good	class discussion and assignment 2 X 50		0%
11	Analyzing GIS data to map disaster- prone areas. Predicting the potential for disasters in several regions of Indonesia	1.Students are able to plan and process GIS data. 2.Students are able to analyze GIS data to map disaster-prone areas. 3.Students are able to predict potential disasters in several regions in Indonesia using GIS data.	Criteria: 1.4 = Very Good 2.3 = Good 3.2 = Fairly Good 4.1 = Not Good	class discussion and assignment 2 X 50		0%
12	Analyzing and Mitigating Climatological Disasters Analyzing and Mitigating Volcanism Disasters Analyzing and Mitigating Technological Disasters Analyzing and Mitigating Social Disasters	1.Students are able to analyze and describe climatological disaster mitigation 2.Students are able to analyze and describe volcanism disaster mitigation 3.Students are able to analyze and describe technological disaster mitigation 4.Students are able to analyze and describe social disaster mitigation	Criteria: 1.4=very good 2.3=good 3.2=fairly good 4.1=not good	Class discussion and expository 2 X 50		0%
13	Analyzing and Mitigating Climatological Disasters Analyzing and Mitigating Volcanism Disasters Analyzing and Mitigating Technological Disasters Analyzing and Mitigating Technological Disasters Analyzing and Mitigating Social Disasters	1.Students are able to analyze and describe climatological disaster mitigation 2.Students are able to analyze and describe volcanism disaster mitigation 3.Students are able to analyze and describe technological disaster mitigation 4.Students are able to analyze and describe social disaster mitigation	Criteria: 1.4=very good 2.3=good 3.2=fairly good 4.1=not good	Class discussion and expository 2 X 50		0%

14	Analyzing and Mitigating Climatological Disasters Analyzing and Mitigating Volcanism Disasters Analyzing and Mitigating Technological Disasters Analyzing and Mitigating Social Disasters	1.Students are able to analyze and describe climatological disaster mitigation 2.Students are able to analyze and describe volcanism disaster mitigation 3.Students are able to analyze and describe technological disaster mitigation 4.Students are able to analyze and describe social disaster mitigation	Criteria: 1.4=very good 2.3=good 3.2=fairly good 4.1=not good	Class discussion and expository 2 X 50		0%
15	Analyzing and Mitigating Climatological Disasters Analyzing and Mitigating Volcanism Disasters Analyzing and Mitigating Technological Disasters Analyzing and Mitigating Social Disasters	1.Students are able to analyze and describe climatological disaster mitigation 2.Students are able to analyze and describe volcanism disaster mitigation 3.Students are able to analyze and describe technological disaster mitigation 4.Students are able to analyze and describe social disaster mitigation	Criteria: 1.4=very good 2.3=good 3.2=fairly good 4.1=not good	Class discussion and expository 2 X 50		0%
16						0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

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.
- 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.
- 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 guantitative 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.
- 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-tonics
- 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.