	Universitas Negeri Surabaya Faculty of Social Sciences and Law, Social Sciences Education Undergraduate Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Disaster Studies	8420702075	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	3	September 4, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
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Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program that is charged to the course

Program Objectives (PO)

PO - 1	Able to process, analyze, present disaster management data

PLO-PO Matrix

P.O
PO-1

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

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PO-1																

Short Course Description	Able to identify types of disasters geologically, climatologically and geomorphologically. Able to identify vulnerabilities to landslides, floods, earthquakes, tsunamis, volcanic eruptions and droughts which are examples of natural disasters that can threaten Indonesian territory at any time. As well as social disasters, social conflicts, such as underdeveloped development, mismanagement of social structures, mismanagement of natural resources. Identify hazard, vulnerability, capacity and risk characteristics in the form of spatial data. Developing disaster mitigation directions in spatial form.

References

Main :

1. Ludman, A. and Nicholas K. Coch . 1982. Physical Geology. USA: McGraw-Hill, Inc
2. Abdullah. 2008. Mitigasi Bencana Alam (Buku Ajar), Jur. Fisika FMIPA UNTAD
3. Tjasyono H. K., Bayong . 2006. Ilmu Kebumian dan Antariksa. Bandung: PT
4. Undang-Undang R. I. No. 24 Tahun 2007. tentang Penanggulangan Bencana.
5. Undang-Undang R. I. No. 32 Tahun 2009. tentang P erlindungan dan Pengelolaan Lingkungan Hidup.
6. Peraturan Pemerintah R. I. No. 21 Tahun 2008. tentang P enyelenggaraan P enanggulangan
7. Agung Mulyo (2004).Pengantar Ilmu Kebumian, Bandung : Pustaka Setia

Supporters:

1. Coburn dan Spence (1994), Mitigasi Bencana, Inggris : Cambridge Architectural

Supporting lecturer	Prof. Dr. Ketut Prasetyo, M.S. Dian Ayu Larasati, S.Pd., M.Sc.

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	Able to understand the scope and objectives of the Disaster Studies course	1. Know the objectives, scope of discussion, lecture procedures 2. Able to understand the scope and objectives of the disaster geography course	**Criteria:** formative **Form of Assessment** : Participatory Activities, Tests	□ PjBL: Lectures, assignments, discussions, presentations 2 X 50	□ PjBL: Lectures, assignments, discussions, presentations	**Material:** Disaster Studies in Indonesia **Library:** *Agung Mulyo (2004). Introduction to Earth Science, Bandung: Pustaka Setia*	5%
2	Understand issues in disaster and mitigation	Analyzing issues in disasters and disaster mitigation	**Criteria:** formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	□ PjBL: Lectures, assignments, discussions, presentations 2 X 50	□ PjBL: Lectures, assignments, discussions, presentations	**Material:** disasters **Reader:** *Agung Mulyo (2004). Introduction to Earth Science, Bandung: Pustaka Setia*	5%
3	Able to explain the meaning, scope and objectives of disaster mitigation	3.1 Explain the meaning of disaster mitigation 3.2 Describe the scope of disaster mitigation 3.3 Explain the purpose and nature of disaster mitigation 3.4 Explain the reasons for the importance of disaster mitigation in everyday life	**Criteria:** Formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Tests	PjBL: □ assignments, lectures □ discussions □ presentations 2 X 50	PjBL: □ assignments, lectures □ discussions □ presentations	**Material:** Disaster Mitigation **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	15%
4	Able to describe Indonesia's geological position, climatology and geomorphological conditions and implications for potential disasters	4.1. Explain the geological position 4.2 Explain the geological position of the Indonesian archipelago through a map of the interface between plates 4.3 Explain the most likely impacts of disasters 4.4 Explain the reality of the ring of fire for islands in Indonesia 4.5 Explain the most likely impacts of disasters in Indonesia due to climate change and geomorphological conditions	**Criteria:** formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Tests	PjBL: □ assignments, lectures □ discussions □ presentations 2 X 50	PjBL: □ assignments, lectures □ discussions □ presentations	**Material:** geological position of Unesa **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	5%
5	Able to describe Indonesia's geological position, climatology and geomorphological conditions and implications for potential disasters	4.1. Explain the geological position 4.2 Explain the geological position of the Indonesian archipelago through a map of the interface between plates 4.3 Explain the most likely impacts of disasters 4.4 Explain the reality of the ring of fire for islands in Indonesia 4.5 Explain the most likely impacts of disasters in Indonesia due to climate change and geomorphological conditions	**Criteria:** formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Tests	PjBL: □ assignments, lectures □ discussions □ presentations 2 X 50		**Material:** geological position of Unesa **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	5%
6	able to analyze earthquakes and tsunamis	5.1 Explain the meaning of an earthquake 5.2 Identify the factors that cause an earthquake 5.3 Classify the types of earthquakes 5.4 Identify the actions that residents need to take when an earthquake occurs 5.5 Explain the relationship between earthquakes and tsunami probability 5.6 Explain the concept of development-oriented disasters	**Criteria:** formative **Form of Assessment** : Project Results Assessment / Product Assessment	Students analyze earthquake and tsunami mitigation problems. 2 X 50	Students analyze earthquake and tsunami mitigation problems.	**Material:** Earthquake and Tsunami **Reference:** *Tjasyono HK, Bayong . 2006. Earth and Space Sciences. Bandung: PT*	5%

7	able to analyze earthquakes and tsunamis	5.1 Explain the meaning of an earthquake 5.2 Identify the factors that cause an earthquake 5.3 Classify the types of earthquakes 5.4 Identify the actions that residents need to take when an earthquake occurs 5.5 Explain the relationship between earthquakes and tsunami probability 5.6 Explain the concept of development-oriented disasters	**Criteria:** formative **Form of Assessment** : Project Results Assessment / Product Assessment	Students analyze earthquake and tsunami mitigation problems. 2 X 50	Students analyze earthquake and tsunami mitigation problems.	**Material:** Earthquake and Tsunami **Reference:** *Tjasyono HK, Bayong . 2006. Earth and Space Sciences. Bandung: PT*	20%
8	UTS	UTS	**Criteria:** Summative **Form of Assessment** : Test	UTS 2 X 50	UTS		10%
9	6.1 Explain the process of volcanic eruptions 6.2 Analyze variations in types of volcanic eruptions 6.3 Explain the character of pre-volcanic symptoms 6.4 Explain the character of post-volcanic symptoms 6.5 Analyze variations in volcanic materials 6.6 Explain the actions that residents need to take Action when a volcanic eruption occurs 6.7 Explain zoning of areas affected by the eruption via map	Analyze the process of volcanic eruptions	**Criteria:** Formative **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Students analyze the problem of volcanic disasters 2 X 50	Students analyze volcanic disaster problems	**Material:** Volcanoes **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	10%
10	6.1 Explain the process of volcanic eruptions 6.2 Analyze variations in types of volcanic eruptions 6.3 Explain the character of pre-volcanic symptoms 6.4 Explain the character of post-volcanic symptoms 6.5 Analyze variations in volcanic materials 6.6 Explain the actions that residents need to take Action when a volcanic eruption occurs 6.7 Explain zoning of areas affected by the eruption via map	Analyze the process of volcanic eruptions	**Criteria:** Formative **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Students analyze the problem of volcanic disasters 2 X 50	Students analyze volcanic disaster problems	**Material:** Volcanoes **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	10%
11	able to analyze the occurrence of floods, droughts and landslides	7.1 Explain the process of disasters caused by climatological conditions 7.2 Explain the character of disasters due to climatological conditions 7.3 Identify the climatological characteristics of disasters 7.4 Analyze climatological disasters 7.5 Explain the actions that residents need to take when floods, droughts and landslides occur 7.6 Explain the zoning of areas affected by disaster climatology through maps	**Criteria:** Formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Students analyze the occurrence of floods, droughts and landslides through the problem 2 X 50	Students analyze the occurrence of floods, droughts and landslides through problems	**Material:** Flood and drought disasters **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	10%

12	able to analyze the occurrence of floods, droughts and landslides	7.1 Explain the process of disasters caused by climatological conditions 7.2 Explain the character of disasters due to climatological conditions 7.3 Identify the climatological characteristics of disasters 7.4 Analyze climatological disasters 7.5 Explain the actions that residents need to take when floods, droughts and landslides occur 7.6 Explain the zoning of areas affected by disaster climatology through maps	**Criteria:** Formative **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Practices / Performance	Students analyze the occurrence of floods, droughts and landslides through the 2 X 50 problem	Students analyze the occurrence of floods, droughts and landslides through problems	**Material:** Flood and drought disasters **Reader:** *Abdullah. 2008. Natural Disaster Mitigation (Textbook), Jur. Physics FMIPA UNTAD*	10%
13	Understand disaster mitigation strategies	□ Understand the types of local wisdom potential and environmental management potential that have the potential to reduce disaster risk □ Understand independent mitigation methods □ Understand Resilience Theory and Concepts in the context of Regions/Cities/Regions □ Understand mitigation methods (planning and management) in the context of Resilience theory and concepts in context Region/City/Region	**Criteria:** Formative **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Students learn disaster mitigation strategies through the 2 X 50 problem	Students learn disaster mitigation strategies through problems		5%
14	Analysis and Mitigation of Technological Disasters	Analyzing: 1. Concept of Technological Disasters 2. Analysis of Technological Disasters in Indonesia 3. Analysis of the Causes of Technological Disasters 4. Analysis of the Impact of Technological Disasters 5. Mitigation of Technological Disasters 6. Local Wisdom as Disaster Mitigation	**Criteria:** Formative **Form of Assessment** : Project Results Assessment / Product Assessment	Students plan a 2 X 50 technological disaster mitigation strategy	Students plan technological disaster mitigation strategies	**Material:** Disaster mitigation strategies **References:** *Coburn and Spence (1994), Disaster Mitigation, England : Cambridge Architectural*	5%
15	Analysis and Mitigation of Technological Disasters	Analyzing: 1. Concept of Technological Disasters 2. Analysis of Technological Disasters in Indonesia 3. Analysis of the Causes of Technological Disasters 4. Analysis of the Impact of Technological Disasters 5. Mitigation of Technological Disasters 6. Local Wisdom as Disaster Mitigation	**Criteria:** Formative **Form of Assessment** : Project Results Assessment / Product Assessment	Students plan a 2 X 50 technological disaster mitigation strategy	Students plan technological disaster mitigation strategies	**Material:** Disaster mitigation strategies **References:** *Coburn and Spence (1994), Disaster Mitigation, England : Cambridge Architectural*	5%
16	Analysis and Mitigation of Technological Disasters	Analyzing: 1. Concept of Technological Disasters 2. Analysis of Technological Disasters in Indonesia 3. Analysis of the Causes of Technological Disasters 4. Analysis of the Impact of Technological Disasters 5. Mitigation of Technological Disasters 6. Local Wisdom as Disaster Mitigation	**Criteria:** Summative **Form of Assessment** : Practice/Performance, Test	Students plan a 2 X 50 technological disaster mitigation strategy	Students plan technological disaster mitigation strategies	**Material:** Disaster mitigation strategies **References:** *Coburn and Spence (1994), Disaster Mitigation, England : Cambridge Architectural*	5%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	31.67%
2.	Project Results Assessment / Product Assessment	64.17%
3.	Practice / Performance	10.83%
4.	Test	23.34%
		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.