	Universitas Negeri Surabaya Faculty of Social and Legal Sciences Geography Education Masters Study Program	Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Advanced Physical Geography	8710220001	Compulsory Study Program Subjects	T=2	P=0	ECTS=4.48	1	April 28, 2023

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	Dr. Nugroho Hari Purnomo, M,Si	Dr. Muzayanah, St. M.T	Dr. Sukma Perdana Prasetya, S.Pd., M.T.

Learning model	**Project Based Learning**

Program Learning Outcomes (PLO)

PLO study program that is charged to the course	
PLO-5	Able to solve scientific problems through research and development activities using geographic technology based on scientific principles
PLO-9	Mastering the dynamics of regional problems based on the concepts and approaches of geographic science to solve problems of structuring regional potential using geographic technology

Program Objectives (PO)	
PO - 1	Have an academic attitude that is inclusive and egalitarian in various situations
PO - 2	Able to explain land dynamics in the context of applied geomorphology
PO - 3	Able to explain maritime problems in the context of physical geography
PO - 4	Able to explain climate change problems in the context of physical geography
PO - 5	Able to formulate global environmental change problems

PLO-PO Matrix

P.O	PLO-5	PLO-9
PO-1		
PO-2		
PO-3		
PO-4		
PO-5		

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																
PO-2																
PO-3																
PO-4																
PO-5																

Short Course Description	Discusses the problem of global environmental change in the context of physical geographic space as a result of land dynamics interacting with sea areas, thereby triggering climate change.
References	**Main :**

1. Utama:Inkpen, Rob. (2005). Science, Philosophy and Physical Geography. New York : Routledge
2. Maslin, Mark, (2004). Global Warming. A Very Short Introductio. Oxford : Oxford University Press
3. Slaymaker, O; Spencer, T.; Hamann (2009). Geomorphology and Global Environmental Change. Cambridge University Press. London
4. Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis
5. Szabó, József; Dávid, Lóránt; Lóczy, Dénes; (2006). Anthropogenic Geomorphology A Guide to Man-Made Landforms. London : Springer
6. Pendukung:Mavi, Harpal S.; Tupper, Graeme J.(2004). Principles and Applications of Climate Studies in Agriculture. London : Food Products Press
7. Grapes, R. H.; Oldroyd, D.; Grigelis, A. (2008). History of Geomorphology and Quaternary Geology. London : The Geological Society
8. Modul-Modul Pengarus utamaan perubahan iklim dalam perencanaan pembangunan daerah. Kementerian PPN/Bappenas

Supporters:	
Supporting lecturer	Dr. Nugroho Hari Purnomo, S.P., M.Si. Dr. Aida Kurniawati, S.Pd., M.Si.

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	Understand the scope of physical geography	1.Explain the concept of physical geography 2.Explain the position of physical geography in geographic science	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities	Lectures, varied discussions, and questions and answers 2 X 50	Lectures, varied discussions, and questions and answers 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	10%
2	Analysis in physical geography	1.Explaining spatial boundaries in the study of physical geography 2.Explaining spatial scales in the study of physical geography	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities	Lectures, varied discussions, questions and answers 2 X 50	Lectures, varied discussions, and questions and answers 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	5%
3	Analysis in physical geography	Conduct physical geographic analysis	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities	2 X 50 contextual learning based assignment	Contextual learning based assignment 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	10%
4	Understand the dynamics of climate change	1.Explain climate-related concepts 2.Explain the characteristics of tropical climates	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities	Lectures, discussions vary 2 X 50	Lectures, discussions vary 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	10%
5	Understand the dynamics of climate change	Explain the dynamics of climate change in tropical regions	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	Lectures, discussions vary 2 X 50	Lectures, discussions vary 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	5%

6	Understand landforms and their applications	Explains the concept of landforms including relief, process, structure, material, and time	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions vary 2 X 50	Lectures, discussions vary 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	5%
7	Understanding landforms and their applications / UTS	Identify landforms for resource potential analysis	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Contextual learning based assignment 2 X 50	Contextual learning based assignment 2 x 50	**Material:** Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis **Bibliography:**	5%
8	Understanding landforms and their applications / UTS	Identify landforms for resource potential analysis	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically	Contextual learning based assignment 2 X 50			0%
9	Understand landforms and their applications	Identify landforms for potential disaster analysis	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Contextual learning based assignment 2 X 50	Contextual learning based assignment 2 x 50	**Material:** Landforms and their applications **References:** *Grapes, RH; Oldroyd, D.; Grigelis, A. (2008). History of Geomorphology and Quaternary Geology. London : The Geological Society*	0%
10	Understand watershed and coastal dynamics	1. Explain the concept of watersheds and coasts 2. Explain the relationship between watersheds and coastal land use	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions vary 2 X 50	Contextual learning-based assignments	**Material:** watershed and coastal concepts **Literature:** *Grapes, RH; Oldroyd, D.; Grigelis, A. (2008). History of Geomorphology and Quaternary Geology. London : The Geological Society* **Material:** watershed and coastal concepts **Reader:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis*	10%

11	Understand watershed and coastal dynamics	Explain the concept and importance of land use for watersheds and coasts	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	2 X 50 contextual learning based assignment	Contextual learning based assignment 2 x 50	**Material:** watershed and coastal dynamics **References:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis*	5%
12	Understand watershed and coastal dynamics	1. Explain the dynamics of land use change 2. Explain the impact of land change on watersheds and coasts	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Contextual learning based assignment 2 X 50	Contextual learning based assignment 2 x 50	**Material:** watershed and coastal dynamics **References:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis* **Material:** watershed and coastal dynamics **References:** *Szabó, József; David, Lórant; Lóczy, Dénes; (2006). Anthropogenic Geomorphology A Guide to Man-Made Landforms. London : Springer*	5%
13	Geomaritime understanding	Explain geomaritime concepts from a physical point of view	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	Contextual learning based assignment 2 X 50	Contextual learning based assignment 2 x 50	**Material:** Geomaritime **Reference:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis*	10%
14	Geomaritime understanding	Explain geomaritime concepts from a physical point of view	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Lectures, discussions vary 2 X 50	Lectures, discussions vary 2 x 50	**Material:** Geomaritime **Reference:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis*	10%
15	Geomaritime understanding	Explain maritime resources and disasters	**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically **Form of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment	Contextual learning based assignment 2 X 50	Contextual learning based assignment 2 x 50	**Material:** Geomaritime **Reference:** *Kay, Robert and Alder Jacqueline. (2005). Coastal Planning and Management. New York : Taylor & Francis*	10%

16	UAS		**Criteria:** Students are able to explain, give examples and analyze conceptually and systematically	2 X 50			0%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	65%
2.	Project Results Assessment / Product Assessment	30%
3.	Portfolio Assessment	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.