	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**
Regional Development Based on Ecology, Resources and Disasters		8710202030	Compulsory Study Program Subjects	**T=2**	**P=0**	**ECTS=4.48**	2	April 28, 2023

AUTHORIZATION	**SP Developer**	**Course Cluster Coordinator**	**Study Program Coordinator**
	Dr. Muzayanah, ST. M.T	Dr. Muzayanah, ST. M.T	Dr. Sukma Perdana Prasetya, S.Pd., M.T.

Learning model	**Case Studies**	
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	Able to analyze development and balanced spatial planning
	PO - 2	Able to analyze problems of the relationship between geographic ecology and natural resources
	PO - 3	Able to analyze disaster risks in development
	PO - 4	Able to analyze integrated spatial analysis of resource, environmental and disaster balances.
	PLO-PO Matrix	

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

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																

Short Course Description	Analyzing natural resource potential and disaster proneness in planning comprehensive regional development based on ecological studies towards balanced development

References	**Main :**	

1.	Ahrens, D & Henson, R., 2016. Meteorology today an introduction to weather, climate and the environment. Cengage learning						
2.	Board on Life Sciences Division on Earth and Life Studies. 2008. Ecological impacts of climate change. Washington, D.C : The National Academies Press						
3.	Liu, J., Taylor, W. 2004. Integrating landscape ecology into natural resource management. Cambridge : Cambridge University Press						
4.	Porfiriev, Boris.(ed). 2009. Climate change as environmental and economic hazard. Environmental Hazards Special Issue, volume 8 (3) (2009). London : Earthscan						
5.	Rustiadi, E., Saefulhakim, S., Panuju, D.R., 2011. Perencanaan dan pengambangan wilayah, Crespent Press.						
6.	Showalter, Pamela S. and Lu, Yongmei; (2010). Geospatial techniques in urban hazard and disaster analysis. London : Springer						

Supporters:

1. Suparmoko, Sudirman, D., Setyarko, Y., Wibowo, H.S. 2014. Valuasi ekonomi sumber daya alam dan lingkungan. BPFE Yogyakarta.
2. Tarigan, Robinson. (2005). Perencanaan pembangunan wilayah. Bumi Aksara.

Supporting lecturer	Dr. Muzayanah, S.T., M.T. 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	Able to identify indicators of balanced development	• Explain the concept of balanced development • Identify development indicators	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	-Lectures and discussions - Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** balanced development **References:** *Board on Life Sciences Division on Earth and Life Studies. 2008. Ecological impacts of climate change. Washington, DC : The National Academies Press*	5%
2	Able to identify indicators of balanced development	• Explain the concept of balanced development • Identify development indicators	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Forms of Assessment** : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	-Lectures and discussions - Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** balanced development **References:** *Board on Life Sciences Division on Earth and Life Studies. 2008. Ecological impacts of climate change. Washington, DC : The National Academies Press*	5%
3	Able to analyze development and spatial planning	• Identify planning stages and processes • Analyze regional developments in each area	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** development and spatial planning **Reference:** *Tarigan, Robinson. (2005). Regional development planning. Literary Earth.*	10%

4	Able to analyze development and spatial planning	• Identify planning stages and processes • Analyze regional developments in each area	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions -Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** development and spatial planning **Reference:** *Rustiadi, E., Saefulhakim, S., Panuju, DR, 2011. Regional planning and development, Crespent Press.*	10%
5	Able to analyze the relationship between geographic ecology and natural resources	Explaining the concept of geographical ecology. Identifying natural resource potential. Analyzing ecology in environmental management	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions -Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** the relationship between geographical ecology and natural resources **References:** *Liu, J., Taylor, W. 2004. Integrating landscape ecology into natural resource management. Cambridge : Cambridge University Press*	10%
6	Able to analyze the relationship between geographic ecology and natural resources	Explaining the concept of geographical ecology. Identifying natural resource potential. Analyzing ecology in environmental management	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** the relationship between geographical ecology and natural resources **References:** *Liu, J., Taylor, W. 2004. Integrating landscape ecology into natural resource management. Cambridge : Cambridge University Press*	10%
7	Able to analyze the relationship between geographic ecology and natural resources	Explaining the concept of geographical ecology. Identifying natural resource potential. Analyzing ecology in environmental management	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 case studies	-Lectures and discussions -Assignment: 3 x 50 case studies	**Material:** relationship between geographical ecology and natural resources **Library:** *Board on Life Sciences Division on Earth and Life Studies. 2008. Ecological impacts of climate change. Washington, DC : The National Academies Press*	10%

8	UTS		**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Test	UTS 2 x 50	UTS 2 x 50	**Material:** resource ecology **References:** *Liu, J., Taylor, W. 2004. Integrating landscape ecology into natural resource management. Cambridge : Cambridge University Press*	1%
9	Able to analyze the impact of climate change for development	• Explain biodiversity and ecosystem services in a changing climate • Analyze the concept of development without endangering the climate	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 book reviews	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** climate change for development **References:** *Porfiriev, Boris.(ed). 2009. Climate change as environmental and economic hazard. Environmental Hazards Special Issue, volume 8 (3) (2009). London : Earthscan*	5%
10	Able to analyze the impact of climate change for development	• Explain biodiversity and ecosystem services in a changing climate • Analyze the concept of development without endangering the climate	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 book reviews	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** climate change for development **References:** *Porfiriev, Boris.(ed). 2009. Climate change as environmental and economic hazard. Environmental Hazards Special Issue, volume 8 (3) (2009). London : Earthscan*	5%
11	Able to analyze the impact of climate change for development	• Explain biodiversity and ecosystem services in a changing climate • Analyze the concept of development without endangering the climate	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment** : Participatory Activities	-Lectures and discussions - Assignment: 3 x 50 book reviews	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** climate change for development **References:** *Porfiriev, Boris.(ed). 2009. Climate change as environmental and economic hazard. Environmental Hazards Special Issue, volume 8 (3) (2009). London : Earthscan*	5%

12	Able to analyze environmental economic valuation	Explain the function and ecosystem. Explain the framework and environmental economic evaluation	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment**: Participatory Activities	-Lectures and discussions -Assignment: 3 x 50 book reviews	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** environmental economic valuation **Reference:** *Suparmoko, Sudirman, D., Setyarko, Y., Wibowo, HS 2014. Economic valuation of natural resources and the environment. BPFE Yogyakarta.*	5%
13	Able to analyze environmental economic valuation	Explain the function and ecosystem. Explain the framework and environmental economic evaluation	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment**: Participatory Activities	-Lectures and discussions -Assignment: 3 x 50 book reviews	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** environmental economic valuation **Reference:** *Suparmoko, Sudirman, D., Setyarko, Y., Wibowo, HS 2014. Economic valuation of natural resources and the environment. BPFE Yogyakarta.*	5%
14	Able to analyze the disaster risk of an area	• Explaining national and international disaster vulnerability • Analyzing a region's disaster vulnerability • Analyzing disaster mitigation and reduction efforts	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment**: Participatory Activities, Portfolio Assessment	-Lectures and discussions -Assignment: book review 3 x50	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** disaster risk **References:** *Showalter, Pamela S. and Lu, Yongmei; (2010). Geospatial techniques in urban hazard and disaster analysis. London : Springer*	7%
15	Able to analyze the disaster risk of an area	• Explaining national and international disaster vulnerability • Analyzing a region's disaster vulnerability • Analyzing disaster mitigation and reduction efforts	**Criteria:** Assignment weight: 25%Performance weight: 25%Knowledge weight: 50% **Form of Assessment**: Participatory Activities, Portfolio Assessment	-Lectures and discussions -Assignment: book review 3 x50	-Lectures and discussions -Assignment: 3 x 50 book reviews	**Material:** disaster risk **References:** *Showalter, Pamela S. and Lu, Yongmei; (2010). Geospatial techniques in urban hazard and disaster analysis. London : Springer*	5%
16	UAS		**Form of Assessment**: Test	UAS	UAS 2 x 50	**Material:** resource ecology **References:** *Rustiadi, E., Saefulhakim, S., Panuju, DR, 2011. Regional planning and development, Crespent Press.*	1%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	84.34%
2.	Project Results Assessment / Product Assessment	3.34%

3.	Portfolio Assessment	9.34%
4.	Test	2%
		99.02%

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.