



**Universitas Negeri Surabaya**  
**Faculty of Social Sciences and Law**  
**Geography Education Undergraduate Study Program**

Document Code

**SEMESTER LEARNING PLAN**

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
APPLIED GIS	8720202214	Engineering Geography	T=1	P=1	ECTS=3.18	5	July 17, 2024
AUTHORIZATION	SP Developer		Course Cluster Coordinator			Study Program Coordinator	
	M. Damanhuri, M.Sc.		Dr. Eko Budiyanto, M.Si.			Dr. Nugroho Hari Purnomo, S.P., M.Si.	

Learning model	Project Based Learning
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Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																		
	PLO-5	Able to make appropriate decisions to solve educational problems and transformative geography learning by utilizing various learning resources based on science and technology and the arts																																																	
	PLO-8	Able to obtain, process, analyze, present geosphere data and information using geospatial technology in integrated geographic studies with in-depth urban studies that support regional sustainability																																																	
	Program Objectives (PO)																																																		
	PO - 1	Apply GIS to synthesize maps																																																	
	PLO-PO Matrix																																																		
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>P.O</td> <td>PLO-5</td> <td>PLO-8</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> </tr> </table>	P.O	PLO-5	PLO-8	PO-1																																													
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PO-1																																																			
PO Matrix at the end of each learning stage (Sub-PO)																																																			
	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2">P.O</td> <td colspan="16">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>	P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																
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PO-1																																																			

Short Course Description	The course discusses the meaning of GIS, GIS components, GIS data, GIS data subsystems, various types of spatial data, map repositioning, digitizing polyline and polygon maps, editing, labeling, transformation, analyzes in GIS, map layout.
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References	Main :	
	Supporters:	

Supporting lecturer	Dra. Ita Mardiani Zain, M.Kes. Dr. Eko Budiyanto, S.Pd., M.Si. Dr. Aida Kurniawati, S.Pd., M.Si.
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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 meaning of GIS and types of spatial data	Accurate understanding of the meaning of GIS and types of spatial data	<b>Criteria:</b> Complete > 69  <b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	presentation, discussion 2 x 50		<b>Material:</b> sig and types of spatial data <b>References:</b>	6%
2	Understand the meaning of GIS and types of spatial data	Accurate understanding of the meaning of GIS and types of spatial data	<b>Criteria:</b> Complete > 69  <b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment, Practice / Performance, Tests	presentation, discussion 2 x 50		<b>Material:</b> sig and types of spatial data <b>References:</b>	5%
3	Understand GIS components, data, subsystems	Accurate understanding of GIS components, data, subsystems	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	practice discussion 2 x 50		<b>Material:</b> subsystem data components <b>Library:</b>	5%
4	Understand GIS components, data, subsystems	Accurate understanding of GIS components, data, subsystems	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment	practice discussion 2 x 50		<b>Material:</b> subsystem data components <b>Library:</b>	5%
5	Repositioning and digitizing	accuracy of repositioning and digitization	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Practice / Performance, Test	practice discussion 2 x 50		<b>Material:</b> digitization repositioning <b>Library:</b>	5%
6	Repositioning and digitizing	accuracy of repositioning and digitization	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> digitization repositioning <b>Library:</b>	5%
7	Repositioning and digitizing	accuracy of repositioning and digitization	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> digitization repositioning <b>Library:</b>	5%
8	UTS		<b>Criteria:</b> Complete > 69	test			0%
9	Editing transformation labeling	Transformation labeling editing accuracy	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	Practice Discussion 2 x 50		<b>Material:</b> transformation labeling editing <b>References:</b>	7%
10	Editing transformation labeling	Transformation labeling editing accuracy	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Practice / Performance, Test	Practice Discussion 2 x 50		<b>Material:</b> transformation labeling editing <b>References:</b>	7%
11	Carrying out analyzes in GIS	Accuracy of analysis in GIS	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Practice/Performance, Test	practice discussion 2 x 50		<b>Material:</b> analysis in GIS <b>Library:</b>	10%

12	Carrying out analyzes in GIS	Accuracy of analysis in GIS	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> analysis in GIS <b>Library:</b>	10%
13	Carrying out analyzes in GIS	Accuracy of analysis in GIS	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> analysis in GIS <b>Library:</b>	10%
14	Laying out maps in GIS	Accuracy of map layout in GIS	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> Map layout in GIS <b>Library:</b>	10%
15	Laying out maps in GIS	Accuracy of map layout in GIS	<b>Criteria:</b> Complete > 69  <b>Form of Assessment :</b> Assessment of Project Results / Product Assessment, Practices / Performance	practice discussion 2 x 50		<b>Material:</b> Map layout in GIS <b>Library:</b>	10%
16	UAS		<b>Criteria:</b> Complete > 69	Test			0%

#### Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	2.75%
2.	Project Results Assessment / Product Assessment	45.25%
3.	Practice / Performance	40.25%
4.	Test	11.75%
		100%

#### 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.
- 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.
- 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.
- 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.
- 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.
- Forms of assessment:** test and non-test.
- 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.
- Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
- 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%.
- TM=Face to face, PT=Structured assignments, BM=Independent study.

