



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
Science phylosophy	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	Mastering the concept of science building in general and synthesizing the position of geographic science in geography learning														
	PO - 3	Able to think rationally to achieve meaning.														
	PO - 4	Able to interpret philosophy in developing geography learning.														
	PLO-PO Matrix															
		<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>P.O</th> <th>PLO-5</th> <th>PLO-9</th> </tr> </thead> <tbody> <tr><td>PO-1</td><td></td><td></td></tr> <tr><td>PO-2</td><td></td><td></td></tr> <tr><td>PO-3</td><td></td><td></td></tr> <tr><td>PO-4</td><td></td><td></td></tr> </tbody> </table>	P.O	PLO-5	PLO-9	PO-1			PO-2			PO-3			PO-4	
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)																																																																																																						
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">P.O</th> <th colspan="16">Week</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th><th>16</th> </tr> </thead> <tbody> <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> <tr><td>PO-2</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> <tr><td>PO-3</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> <tr><td>PO-4</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> </tbody> </table>	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																
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	Discusses the nature of science; theory building; the position of science in general and specifically (ontological, epistemological and axiological) in education and geography.
---------------------------------	--

References	Main :
-------------------	---------------

1. Ihalaui, J. J. O. I., (2004). *Bangunan Teori*. Salatiga, Satya Wacana University Press
- 2) Suharyono dan Amien, M., (1994). *Pengantar Filsafat Geografi*. Jakarta, Departemen Pendidikan dan Kebudayaan
- 3) Matthews, J.A. and Herbert, D.T., (2004). *Unifying Geography. Common Heritage, Share Future*. London, Routledge Taylor & Francis Group
- 4) The Liang Gie. (1999). *Pengantar Filsafat Ilmu*. Yogyakarta: Liberty
- 5) Suriasumantri, Jujun. (2002). *Filsafat Ilmu: Sebuah Pengantar Populer*. Jakarta: Pusaka Harapan
- 6) Supriyanto, Stefanus. (2013). *Filsafat Ilmu*. Jakarta: Prestasi Pustaka
- 7) O'neil, William F., (2001). *Ideologi-ideologi Pendidikan*. Penerjemah : Omi Intan Naomi. Pustaka Pelajar :Yogyakarta
- 8) Mudhofir; Mustansyir; Soeprapto; Bakry; Hamami, Tjahyadi, (1996). *Filsafat Ilmu*. Yogyakarta: Liberty – Fakultas Filsafat UGM
- 9) Keraf, Sony.2010. *Etika LingkunganHidup*. Jakarta : Kompas
- 10) Daljoni. 1987. *Pengantar Filsafat Geografi*. Bandung : Alumni

Supporters:

1. The Liang Gie. (1999). *Pengantar Filsafat Ilmu*. Yogyakarta: Liberty
2. Cheek, D. W. (1992). *Thinking constructively about science, technology, and society education*. New York: State University of New York Press.

Supporting lecturer
 Prof. Dr. Maria Veronika Roesminingsih, M.Pd.
 Prof. Dr. Ketut Prasetyo, M.S.
 Dr. Nugroho Hari Purnomo, S.P., 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 philosophy, philosophy of life, and environmental philosophy	<ul style="list-style-type: none"> · Explain philosophy · Explain philosophy of life · Explain environmental philosophy 	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and 2 X 50 questions and answers	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	<p>Material: the essence of philosophy</p> <p>Reference: Ihalauw, JJOI, (2004). <i>Theory Building. Salatiga, Satya Wacana University Press 2)</i> Suharyono and Amien, M., (1994). <i>Introduction to the Philosophy of Geography. Jakarta, Department of Education and Culture 3)</i> Matthews, JA and Herbert, DT, (2004). <i>Unifying Geography. Common Heritage, Share Future. London, Route Taylor & Francis Group 4)</i> The Liang Gie. (1999). <i>Introduction to the Philosophy of Science. Yogyakarta: Liberty 5)</i> Suriasumantri, Jujun. (2002). <i>Philosophy of Science: A Popular Introduction. Jakarta: Heritage of Hope 6)</i> Supriyanto, Stefanus. (2013). <i>Science phylosophy . Jakarta: Achievement Library 7)</i> O'neil, William F., (2001). <i>Educational ideologies. Translator: Omi Intan Naomi. Student Library: Yogyakarta 8)</i> Mudhofir; Mustansyir; Soeprapto; Bakry; Hamami, Tjahyadi, (1996). <i>Science phylosophy . Yogyakarta: Liberty – Faculty of Philosophy UGM 9)</i> Keraf, Sony. 2010. <i>Environmental Ethics. Jakarta : Kompas 10)</i> Daljoni. 1987. <i>Introduction to the Philosophy of Geography. Bandung: Alumni</i></p>	10%
---	---	--	--	---	--	--	-----

2	Understand the development of science and understand the relationship between science, technology and culture	· Explain the development of science. Explain science, technology, culture	Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50% Form of Assessment : Participatory Activities	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and 2 X 50 questions and answers	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	Material: Philosophy of geography Bibliography: Dajoni. 1987. <i>Introduction to the Philosophy of Geography.</i> Bandung: Alumni	6%
3	Understand scientific logic, understand scientific truth, and the basis for scientific research	· Explain scientific logic · Explain scientific truth Explain the basis of scientific research	Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50% Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continued: Student groups prepare articles, presentations, lecturers facilitate class discussions and questions and answers 2 X 50	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	Material: philosophy of science Literature: Mudhofir; Mustansyir; Soeprapto; Bakry; Hamami, Tjahyadi, (1996). <i>Science phylosophy.</i> Yogyakarta: Liberty – Faculty of Philosophy UGM	6%
4	Understand the tools of scientific thinking, scientific methods, and scientific ethics	· Explain the tools of scientific thinking · Explain the scientific method Explain the ethics of science	Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and 2 X 50 questions and answers	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	Material: scientific thinking, scientific methods, and science ethics References: Ravertz, JR (2004). <i>Science phylosophy.</i> (Translated: Saud Pasaribu). Yogyakarta: Student Library.	6%
5	Understand the objectivity of science and theory building	· Explaining the objectivity of science. Explaining theory building	Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50% Form of Assessment : Participatory Activities	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and 2 X 50 questions and answers	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	Material: scientific objectivity and theory building References: Ravertz, JR (2004). <i>Science phylosophy.</i> (Translated: Saud Pasaribu). Yogyakarta: Student Library.	6%

6	Understand concepts and propositions	· Explaining concepts · Explaining propositions Exemplifying concepts and propositions	<p>Criteria: Assignment weight: 25%Performance weight: 25%Knowledge weight: 50%</p> <p>Form of Assessment : Participatory Activities, Portfolio Assessment</p>	presentations, as well as facilitating class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and questions and answers 2 X 50	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	<p>Material: concepts and propositions Library: <i>The Liang Gie. (1999). Introduction to the Philosophy of Science. Yogyakarta: Liberty</i></p>	6%
7	Understand theories and paradigms	· Explaining theories · Explaining paradigms Exemplifying theories and paradigms	<p>Criteria: Assignment weight: 25%Performance weight: 25%Knowledge weight: 50%</p> <p>Form of Assessment : Participatory Activities, Portfolio Assessment</p>	Lecturer makes presentations, and facilitates class discussions and questions and answers. Continuing with the Student Group preparing articles, presentations, the lecturer facilitates class discussions and 2 X 50 questions and answers	Prepare a summary in the form of a paper about the meaning of knowledge, science and philosophy along with examples 2 x 50	<p>Material: theory and paradigm Reference: <i>Suharyono and Amien, M., (1994). Introduction to the Philosophy of Geography. Jakarta, Department of Education and Culture</i></p>	6%
8	Students are able to solve UTS questions correctly		<p>Form of Assessment : Test</p>	2 X 50			1%
9	Ontological understanding of education	Explaining the ontology of education	<p>Criteria: Assignment weight: 25%Performance weight: 25%Knowledge weight: 50%</p> <p>Form of Assessment : Participatory Activities</p>	Individual student presentations, lecturer facilitates 2 X 50 discussions	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x50	<p>Material: Ontological education Bibliography: <i>Ravertz, JR (2004). Science phylosophy. (Translated: Saud Pasaribu). Yogyakarta: Student Library.</i></p>	6%
10	Epistemological understanding of education	Explaining educational epistemology	<p>Criteria: Assignment weight: 25%Performance weight: 25%Knowledge weight: 50%</p> <p>Form of Assessment : Project Results Assessment / Product Assessment</p>	Individual student presentations, lecturer facilitates class discussion and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x 50	<p>Material: Educational epistemologies References: <i>Cheek, DW (1992). Thinking constructively about science, technology, and society education. New York: State University of New York Press.</i></p>	6%

11	Axiological understanding of education	Explaining educational axiology	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Individual student presentations, lecturer facilitates class discussion and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x50	<p>Material: Axiological education Reference: <i>Cheek, DW (1992). Thinking constructively about science, technology, and society education. New York: State University of New York Press.</i></p>	8%
12	Ontological understanding of geography	Explaining ontological geography	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Form of Assessment : Participatory Activities</p>	Individual student presentations, lecturer facilitates class discussion and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x 50	<p>Material: Ontological geography Reference: <i>Suharyono and Amien, M., (1994). Introduction to the Philosophy of Geography. Jakarta, Department of Education and Culture</i></p>	8%
13	Epistemological understanding of geography	Explaining epistemological geography	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Individual student presentations, lecturers facilitate class discussions and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x 50	<p>Material: Epistemology of geography Bibliography: <i>Supriyanto, Stefanus. (2013). Science phylosophy. Jakarta: Library Achievement</i></p>	8%
14	Axiological understanding of geography	Explaining axiological geography	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Individual student presentations, lecturer facilitates class discussion and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x 50	<p>Material: Axiological geography Reference: <i>Suharyono and Amien, M., (1994). Introduction to the Philosophy of Geography. Jakarta, Department of Education and Culture</i></p>	8%
15	Understand the development of educational philosophy and the development of geographical philosophy	· Explain the development of the philosophy of education. Explain the development of the philosophy of geography	<p>Criteria: Assignment weight: 25% Performance weight: 25% Knowledge weight: 50%</p> <p>Forms of Assessment : Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>	Individual student presentations, lecturer facilitates class discussion and questions and answers 2 X 50	Group discussion; Explanation & discussion of the philosophy of Geography education 2 x 50	<p>Material: Development of philosophy of education and Development of philosophy of geography Reference: <i>Suharyono and Amien, M., (1994). Introduction to the Philosophy of Geography. Jakarta, Department of Education and Culture</i></p>	8%
16	UAS		<p>Form of Assessment : Test</p>	2 X 50			6%

Evaluation Percentage Recap: Project Based Learning

No	Evaluation	Percentage
1.	Participatory Activities	48.01%
2.	Project Results Assessment / Product Assessment	22.01%

3.	Portfolio Assessment	22.01%
4.	Test	7%
		99.03%

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.