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

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Science phylosophy	6310102007	Compulsory Study Program Subjects	T=2	P=0	ECTS=3.18	1	July 19, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	TIM MBKM	TIM MBKM	Dr. Tjitjik Rahaju, M.Si.

Learning model	**Case Studies**

Program Learning Outcomes (PLO)

PLO study program that is charged to the course

Program Objectives (PO)

PO - 1	Able to analyze various scientific problems with the basis and subject of scientific ontological, epistemological and axiological studies independently, including reflection and implementation in scientific and educational development, as well as scientific material, formal and moral responsibilities

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	This course discusses definitions, history, concepts, and the scope of discussion of the philosophy of science, as well as relating it to knowledge in ontology, epistemology, and axiology.

References

Main :

1. Pramono, Made. Dkk. 2005. Filsafat Ilmu (Kajian Ontologi, Epistemologi, dan Aksiologi). Surabaya: Unesa Unipress.
2. Pramono, Made, E-Learning Filsafat Ilmu: http://elearning.unesa.ac.id
3. Kuipers, Theo A.F. (ed.). 2007. Handbook of The Philosophy of Science: General Philosophy of Science - Focal Issues. Netherlands:Elsevier BV.
4. Endraswara, Suwardi. 2012. Filsafat Ilmu: Konsep, Sejarah, dan Pengembangan Metode Ilmiah. Yogyakarta: CAPS
5. Prawironegoro, Darsono. 2010. Filsafat Ilmu: Kajian tentang Pengetahuan yang Disusun Secara Sistematis dan Sistemik dalam Membangun Ilmu Pengetahuan. Jakarta: Nusantara Consulting
6. Thomas Boyer-Kassem and Cyrille Imbert. 2015. Scientific Colaboration: Do Two Heads Need to Be More than Twice Better than One? Source: Philosophy of Science, Vol. 82, No. 4 (October 2015), pp. 667-668 Published by: The University of Chicago Press on behalf of the Philosophy of Science Association Stable URL: http://www.jstor.org/stable/10.1086/682940 Accesed: 11/09/2014 14:13
7. Rosenberg, Alex. 205. The Philosophy of Science : A Contemporary Introduction-2end ed. Newyork: Routledge
8. Risjord, Mark W. 2014. Philosophy of social science : a contemporary introduction. New York. Routledge

Supporters:

Supporting lecturer	

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	Identify the meaning, scope, discussion, history and position of the philosophy of science	1. Identify several definitions of the philosophy of science 2. Identify the scope of discussion of the philosophy of science 3. Describes the history of the philosophy of science 4. Explain the position of the philosophy of science	**Criteria:** 1. Students are able to identify several understandings of the philosophy of science 2. Students are able to identify the scope of discussion of the philosophy of science 3. Students are able to explain the history of the philosophy of science 4. Students are able to explain the position of the philosophy of science **Form of Assessment** : Participatory Activities		Presentation and question and answer 200 minutes	**Material:** Understanding the Philosophy of **Library Science:** *Pramono, Made. et al. 2005. Philosophy of Science (Study of Ontology, Epistemology and Axiology). Surabaya: Unesa Unipress.* **Material:** History of Philosophy of Science **Library:** *Pramono, Made, E-Learning Philosophy of Science: http://elearning.unesa.ac.id/...*	5%
2	Identify the meaning, scope, discussion, history and position of the philosophy of science	1. Identify several definitions of the philosophy of science 2. Identify the scope of discussion of the philosophy of science 3. Describes the history of the philosophy of science 4. Explain the position of the philosophy of science	**Criteria:** 1. Students are able to identify several understandings of the philosophy of science 2. Students are able to identify the scope of discussion of the philosophy of science 3. Students are able to explain the history of the philosophy of science 4. Students are able to explain the position of the philosophy of science **Form of Assessment** : Participatory Activities		Presentation and question and answer 200 minutes	**Material:** Understanding the Philosophy of **Library Science:** *Pramono, Made. et al. 2005. Philosophy of Science (Study of Ontology, Epistemology and Axiology). Surabaya: Unesa Unipress.* **Material:** History of Philosophy of Science **Library:** *Pramono, Made, E-Learning Philosophy of Science: http://elearning.unesa.ac.id/...*	5%
3	Understanding General Scientific Conceptions	1. Identify different types and sources of knowledge 2. Defining science based on its characteristics, nature and essence 3. Outlining the history of science 4. Explain the differences between science and philosophy, religion and art	**Criteria:** 1. Students are able to identify various types and sources of knowledge 2. Students are able to define science based on its characteristics, nature and essence 3. Students are able to explain the history of science 4. Students are able to explain the differences between science and philosophy, religion and art **Form of Assessment** : Participatory Activities		Presentation and question and answer 200 minutes	**Material:** History Source of Knowledge **Library:** *Endraswara, Suwardi. 2012. Philosophy of Science: Concepts, History, and Development of Scientific Methods. Yogyakarta: CAPS* **Material:** Differences between science and philosophy, religion and art **References:** *Kuipers, Theo AF (ed.). 2007. Handbook of The Philosophy of Science: General Philosophy of Science - Focal Issues. Netherlands:Elsevier BV.*	5%

4	Understanding General Scientific Conceptions	1. Identify different types and sources of knowledge 2. Defining science based on its characteristics, nature and essence 3. Outlining the history of science 4. Explain the differences between science and philosophy, religion and art	**Criteria:** 1. Students are able to identify various types and sources of knowledge 2. Students are able to define science based on its characteristics, nature and essence 3. Students are able to explain the history of science 4. Students are able to explain the differences between science and philosophy, religion and art **Form of Assessment** : Participatory Activities		Presentation and question and answer 200 minutes	**Material:** History Source of Knowledge **Library:** *Endraswara, Suwardi. 2012. Philosophy of Science: Concepts, History, and Development of Scientific Methods. Yogyakarta: CAPS* **Material:** Differences between science and philosophy, religion and art **References:** *Kuipers, Theo AF (ed.). 2007. Handbook of The Philosophy of Science: General Philosophy of Science - Focal Issues. Netherlands:Elsevier BV.*	5%
5	Examining Scientific Problems on the Basis of Scientific Ontology	1. Defining ontology and scientific ontology 2. Explain the streams of scientific ontology 3. Explains the character's thoughts about scientific ontology	**Criteria:** 1. Students are able to define ontology and scientific ontology 2. Students are able to explain the streams of scientific ontology 3. Students are able to explain the characters' thoughts about scientific ontology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Ontology **Literature:** *Prawironegoro, Darsono. 2010. Philosophy of Science: Study of Knowledge Organized Systematically and Systemically in Building Science. Jakarta: Nusantara Consulting*	5%
6	Examining Scientific Problems on the Basis of Scientific Ontology	1. Defining ontology and scientific ontology 2. Explain the streams of scientific ontology 3. Explains the character's thoughts about scientific ontology	**Criteria:** 1. Students are able to define ontology and scientific ontology 2. Students are able to explain the streams of scientific ontology 3. Students are able to explain the characters' thoughts about scientific ontology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Ontology **Literature:** *Prawironegoro, Darsono. 2010. Philosophy of Science: Study of Knowledge Organized Systematically and Systemically in Building Science. Jakarta: Nusantara Consulting*	5%
7	Examining Scientific Problems on the Basis of Scientific Epistemology	1. Defining epistemology and scientific epistemology 2. Explain the schools of scientific epistemology 3. Explains the character's thoughts about scientific epistemology	**Criteria:** 1. Students are able to define epistemology and scientific epistemology 2. Students are able to explain the schools of scientific epistemology 3. Students are able to explain the characters' thoughts about scientific epistemology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Epistemology **Literature:** *Prawironegoro, Darsono. 2010. Philosophy of Science: Study of Knowledge Organized Systematically and Systemically in Building Science. Jakarta: Nusantara Consulting*	5%

8	Students are able to work on questions originating from material sources from meetings 1 to 7	Suitability of answers	**Criteria:** Suitability of answers **Form of Assessment** : Test		Test 2x50 minutes	**Material:** Scientific Epistemology **Literature:** *Prawironegoro, Darsono. 2010. Philosophy of Science: Study of Knowledge Organized Systematically and Systemically in Building Science. Jakarta: Nusantara Consulting* **Material:** Understanding the Philosophy of **Library Science:** *Pramono, Made. et al. 2005. Philosophy of Science (Study of Ontology, Epistemology and Axiology). Surabaya: Unesa Unipress.* **Material:** History of Philosophy of Science **Library:** *Pramono, Made, E-Learning Philosophy of Science: http://elearning.unesa.ac.id/...*	15%
9	Examining Scientific Problems on the Basis of Scientific Epistemology	1.Defining epistemology and scientific epistemology 2.Explain the schools of scientific epistemology 3.Explains the character's thoughts about scientific epistemology	**Criteria:** 1.Students are able to define epistemology and scientific epistemology 2.Students are able to explain the schools of scientific epistemology 3.Students are able to explain the characters' thoughts about scientific epistemology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Epistemology **Literature:** *Prawironegoro, Darsono. 2010. Philosophy of Science: Study of Knowledge Organized Systematically and Systemically in Building Science. Jakarta: Nusantara Consulting*	5%
10	Examining Scientific Problems on the Basis of Scientific Axiology	1.Defining Axiology and Scientific Axiology 2.Explain the schools of scientific axiology 3.Explains the character's thoughts about scientific axiology	**Criteria:** 1.Students are able to define Axiology and Scientific Axiology 2.Students are able to explain the schools of scientific axiology 3.Students are able to explain the figures' thoughts about scientific axiology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Axiology **Bibliography:** *Rosenberg, Alex. 205. The Philosophy of Science : A Contemporary Introduction-2nd ed. New York: Routledge*	5%
11	Examining Scientific Problems on the Basis of Scientific Axiology	1.Defining Axiology and Scientific Axiology 2.Explain the schools of scientific axiology 3.Explains the character's thoughts about scientific axiology	**Criteria:** 1.Students are able to define Axiology and Scientific Axiology 2.Students are able to explain the schools of scientific axiology 3.Students are able to explain the figures' thoughts about scientific axiology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Axiology **Bibliography:** *Rosenberg, Alex. 205. The Philosophy of Science : A Contemporary Introduction-2nd ed. New York: Routledge*	5%

12	Examining Scientific Problems on the Basis of Scientific Axiology	1. Defining Axiology and Scientific Axiology 2. Explain the schools of scientific axiology 3. Explains the character's thoughts about scientific axiology	**Criteria:** 1. Students are able to define Axiology and Scientific Axiology 2. Students are able to explain the schools of scientific axiology 3. Students are able to explain the figures' thoughts about scientific axiology **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Scientific Axiology **Bibliography:** *Rosenberg, Alex. 205. The Philosophy of Science : A Contemporary Introduction-2nd ed. New York: Routledge*	5%
13	Integrating Philosophy of Science Themes with Contemporary Humanitarian Issues	Explain and analyze contemporary humanitarian issues using philosophical analysis of science	**Criteria:** Students are able to explain and analyze contemporary humanitarian issues using philosophical analysis of science **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Contemporary Humanitarian Issues **References:** *Risjord, Mark W. 2014. Philosophy of social science : a contemporary introduction. New York. Routledge*	5%
14	Integrating Philosophy of Science Themes with Contemporary Humanitarian Issues	Explain and analyze contemporary humanitarian issues using philosophical analysis of science	**Criteria:** Students are able to explain and analyze contemporary humanitarian issues using philosophical analysis of science **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Contemporary Humanitarian Issues **References:** *Risjord, Mark W. 2014. Philosophy of social science : a contemporary introduction. New York. Routledge*	5%
15	Integrating Philosophy of Science Themes with Contemporary Humanitarian Issues	Explain and analyze contemporary humanitarian issues using philosophical analysis of science	**Criteria:** Students are able to explain and analyze contemporary humanitarian issues using philosophical analysis of science **Form of Assessment** : Participatory Activities		Presentation, Discussion and Q&A 200 minutes	**Material:** Contemporary Humanitarian Issues **References:** *Risjord, Mark W. 2014. Philosophy of social science : a contemporary introduction. New York. Routledge*	5%
16	Students are able to work on questions from meeting material 1 to 15	Suitability of answers	**Criteria:** Suitability of answers **Form of Assessment** : Test		Test 2x50 minutes	**Material:** Contemporary Humanitarian Issues **References:** *Risjord, Mark W. 2014. Philosophy of social science : a contemporary introduction. New York. Routledge*	15%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	70%
2.	Test	30%
		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.