

Module/ Course Title: Science Philosophy					
Module /Course code	Student Workload	Credits (Sks/Ects)	Semester	Frequency	Duration
SBF60002	5 hours 40 minutes per week	2 CU x 1,5 = 3 ECTS	Even	2 CU x 16 = 32	16 meetings
1	Types of courses Faculty of Cultural Sciences Course	Contact Hours 2 CU x 50 minutes = 100 = 1 hour 40 minutes per week	Independent Study 2 CU x 120 minutes = 240 minutes = 4 hours	Class Size 30 students	
2	Prerequisites for participation -				
3	<p>Learning outcomes After completing this course students are able to:</p> <ol style="list-style-type: none"> Understand various philosophical concepts and theories, their position, focus, scope, objectives and functions to be used as a rationale for planning and developing science Understand the philosophy of science as a means of self-development for a scientist with fundamental vision and orientation of philosophy based on values, morals, and academic ethics Apply the philosophy of science as the basis for a logical, critical, systematic framework of thinking Understand the implications of the development of science by applying humanity values <p>Intended Learning Outcome</p> <ol style="list-style-type: none"> ILO 1 able to demonstrate Japanese language skills (listening, speaking, reading, and writing) according to the level, from Basic Japanese (JLPT N5), Pre-Intermediate (JLPT N4), Intermediate (JLPT N3), and Pre-Advanced (JLPT N2) ILO 7 able to communicate ideas in teams that have multicultural and multidisciplinary members 				
4	<p>Subject aims/ Content (Sub-CPMK)</p> <p>The Philosophy of Science Course is a Philosophy Course with the field of study being Science. For non-philosophy (Cultural) students, this course is intended to provide some basic insights in understanding their respective scientific positions in the midst of a broad scientific treasure. Therefore, lecture materials are avoided from pure philosophy lecture materials and are more directed at the orientation of opening up insight about several important things related to science. They include Knowledge, Philosophy, Religion, and various enlightening critical debates, as well as a variety of discourses on changing the paradigm of the sciences ranging from very strictly scientific to the random search for truth in non-scientific spaces. In the last four meetings, students are invited to be more aware of the relevance of philosophy of science and the ethics of its application in the humanities. In short, this course is intended to encourage students of the humanities sciences to not narrowly view science, but to be open to the diversity of sciences that are currently developing very rapidly and specifically. The specification of the science they are pursuing is only one small field that must be reconciled and associated with other sciences.</p>				

	<p>Course content</p> <ol style="list-style-type: none"> 1. Week 1: Introduction of RPS and lecture contract 2. Week 2: identifying human ventures in seeking the truth. 3. Week 3: identifying the categories of truth, namely Science, Philosophy, Religion 4. Week 4: identifying the Truth through Religious Phenomenology 5. Week 5: understanding the tree of knowledge and the integration of sciences 6. Week 6: recognizing the basic schools of philosophy in getting the truth of empiricism and rationalism 7. Week 7: identifying the basic schools of philosophy in obtaining the truth of structuralism and post-structuralism 8. Week 8: Mid-term Examination 9. Week 9: understanding the Paradigm of the Sciences: Positivism and Inductivism and their problems. 10. Week 10: understanding the dynamics of the Lakatos' Safety Belt to answer the Popper's falsification and Thomas Kuhn's Paradigm Shift. 11. Week 11: identifying the views of Feyerabend's Epistemological Anarchism and Umberto Eco's Abduction theory. 12. Week 12: incorporating philosophical ideas into the realm of Linguistics 13. Week 13: incorporating philosophical ideas into the realm of Educational Science 14. Week 14: incorporating philosophical ideas into the realm of the Arts 15. Week 15: incorporating philosophical ideas pragmatically into Applied Ethics. 16. Week 16: Final Examination 						
4	<p>Teaching methods</p> <p>The learning method refers to an active learning strategy carried out with active student involvement and inquiry-based collaboration (Project Based Learning). Students actively seek for various relevant reference sources, lecturers as facilitators providing stimulus and act as facilitators during the lectures. Lectures are carried out by providing several study themes such as: 1) explanatory lectures and discussion, 2) group presentation, and 3) assignments in the form of writing an essay from the references based on the discussion in the class</p>						
5	<p>Assessment methods</p> <p>The test/evaluation method is carried out through structured assignments, mid-semester examination, final semester examination, as well as class participation. The final score in this lecture is obtained through the formula or calculation below.</p> <p>FS = 0,50 PBL + 0,10 Q + 0,20 ME + 0,20 FE</p> <p>Notes:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">FS = Final Score</td> <td style="width: 50%;">CBL = Project Based Learning</td> </tr> <tr> <td>Q = Quiz</td> <td>ME = Midterm Exams</td> </tr> <tr> <td></td> <td>FE = Final Exams</td> </tr> </table>	FS = Final Score	CBL = Project Based Learning	Q = Quiz	ME = Midterm Exams		FE = Final Exams
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Q = Quiz	ME = Midterm Exams						
	FE = Final Exams						
6	<p>This module is used in the following degree programmes as well: (No)</p>						
7	<p>Module/Course Coordinator: Dr. Hipolitus K. Kewuel, M.Hum</p>						

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Other information:

Lectures use primary references such as journals, books and learning resources as follows:


Primary references:

1. Gaardner, Jostein, 1996, *Dunia Sophie*, Bandung: Mizan
2. Hadiwijono, Harun, 1980, *Sari Sejarah Filsafat Barat 1*, Yogyakarta: Kanisius
3. Hadiwijono, Harun, 1980, *Sari Sejarah Filsafat Barat 2*, Yogyakarta: Kanisius
4. K. Bertens, 2002, *Filsafat Barat Kontemporer, Inggris-Jerman*, Jakarta: Gramedia Pustaka Utama
5. Keraf, A. (2001). *Sony dan Mikhael Dua. Ilmu Pengetahuan. Sebuah Tinjauan Filosofis*. Yogyakarta Penerbit Kanisius.
6. Madjid, Nurcholish (ed.), 1999, *Passing Over: Melintas Batas Agama*, Jakarta: Gramedia
7. Palmquist, Stephen. *Pohon Filsafat. Pustaka Pelajar*
8. Tim Redaksi Driyarkara (ed.) *Hakikat Pengetahuan: Cara Kerja Ilmu-ilmu*, Jakarta: Gramedia, 1993
9. Tjahjadi, S. P. L. (2004). *Petualangan Intelektual*. Yogyakarta: Kanisius.
10. Wibisono, Koento, 1983, *Arti Perkembangan Menurut Filsafat Positivisme Auguste Comte*, Yogyakarta: Gajah Mada University Press

Secondary references:

1. Dewantara, Ki Hajar, 2009, *Menuju Manusia Merdeka*, Yogyakarta: Leutika
2. Dhavamony, Mariasusai, 1995, *Fenomenologi Agama*, Yogyakarta: Kanisius
3. F. Budi Hardiman, 2004, *Filsafat Modern, dari Machiavelli sampai Nietzsche*, Yogyakarta, Jakarta: Gramedia Pustaka Utama
4. Freire, Paulo, 2000, *Pedagogy of Freedom: Ethics, Democracy, and Civic Courage (Critical Perspectives Series: A Book Series Dedicated to Paulo Freire)*, translated by Patrick Clarke, New York: Rowman & Littlefield Publishers, Inc.
5. Kaelan, 1998, *Filsafat Bahasa: Masalah dan Pengembangannya*, Yogyakarta: Paradigma
6. Mustansyir, Rizal dan Misnal Munir, *Filsafat Ilmu, Pustaka Pelajar*. Yogyakarta, 2003
7. Sudiarja, A., dkk. (ed.), 2006, *Karya Lengkap Driyarkara*, Jakarta: Gramedia Pustaka Utama
8. Sugiharto, Bambang. 2013. *Untuk Apa Seni?*. Bandung: Pustaka Matahari
9. Suryajaya, Martin, 2016, *Sejarah Estetika*, Jakarta Barat: Gang Kabel

Appendix Task Guidelines and Rubrics 1

	<p>UNIVERSITAS BRAWIJAYA FACULTY OF CULTURAL STUDIES DEPARTMENT OF LANGUAGE EDUCATION STUDY PROGRAMME OF INDONESIAN LANGUAGE AND LITERATURE EDUCATION</p>				
STUDENT TASK GUIDELINE					
COURSE TITLE	Philosophy of Science				
CODE	SBF60002	CREDITS	3	SEMESTER	4
LECTURER OF THE COURSE	Yohanes Padmo Adi Nugroho, S.S., M.Hum.				
TASK FORM					
Study Group Discussion and Presentation					
COURSE LEARNING OUTCOME					
<ol style="list-style-type: none"> 1. Being able to understand various philosophical concepts and theories, their position, focuses, scopes, goals, and functions so that they can be used as a rationale for planning and developing science 2. Being able to understand the philosophy of science as a means of self-development as a scientist who has a basic vision and orientation of philosophy based on values, morals, and academic ethics 					
DESCRIPTION					
Discussion about a philosophy topic within the study group, then write the result down on a paper. On the time given, they will present the result in front of the class (plenary discussion).					
METHOD OF COMPLETION					
<ol style="list-style-type: none"> 1. Students congregate in a group discussion of 5-6 persons. There will be 6-7 groups. 2. Each group will get a topic of philosophy. 3. They discuss the topic within their own group. 4. Then write the result down on a paper. 5. On the time given, they will present the result in front of the class (plenary discussion). 					

OUTCOMES

- a. A short paper (3-5 pages) about the topic they discuss in the study group.
- b. A PowerPoint file consists of presentation points.

INDICATORS, CRITERIA, AND PERCENTAGE OF GRADING

ASPECT	DESCRIPTOR	Score			
		1	2	3	4
Understanding	Students understand the topic of philosophy given to them.				
Activity	Students actively discuss in their own study group.				
Communication	Students communicate the idea in their own study group as well as in the class.				
Genuine	The paper they write is not plagiarism.				
Responsibility	Each student actively gets involved in the study group, read the sources related to the				

	topic, do the discussions, wrote the papers, and present them in front of the class.				
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TIMES

Meeting 9, 10, 11, 12, 13, 14, and 15

OTHERS: -

REFERENCES


Primary:

- K. Bertens, 2002, Filsafat Barat Kontemporer, Inggris-Jerman, Jakarta: Gramedia Pustaka Utama
- Keraf, A. (2001). Sony dan Mikhael Dua. Ilmu Pengetahuan. Sebuah Tinjauan Filosofis. Yogyakarta Penerbit Kanisius.
- Madjid, Nurcholish (ed.), 1999, Passing Over: Melintas Batas Agama, Jakarta: Gramedia
- Palmquist, Stephen. Pohon Filsafat. Pustaka Pelajar
- Tim Redaksi Driyarkara (ed.) Hakikat Pengetahuan: Cara Kerja Ilmu-ilmu, Jakarta: Gramedia, 1993
- Tjahjadi, S. P. L. (2004). Petualangan Intelektual. Yogyakarta: Kanisius.
- Wibisono, Koento, 1983, Arti Perkembangan Menurut Filsafat Positivisme Auguste Comte, Yogyakarta: Gajah Mada University Press

Secondary:

- Dewantara, Ki Hajar, 2009, Menuju Manusia Merdeka, Yogyakarta: Leutika
- Dhavamony, Mariasusai, 1995, Fenomenologi Agama, Yogyakarta: Kanisius
- F. Budi Hardiman, 2004, Filsafat Modern, dari Machiavelli sampai Nietzsche, Yogyakarta, Jakarta: Gramedia Pustaka Utama
- Freire, Paulo, 2000, Pedagogy of Freedom: Ethics, Democracy, and Civic Courage (Critical Perspectives Series: A Book Series Dedicated to Paulo Freire), translated by Patrick Clarke, New York: Rowman & Littlefield Publishers, Inc.
- Kaelan, 1998, Filsafat Bahasa: Masalah dan Pengembangannya, Yogyakarta: Paradigma
- Mustansyir, Rizal dan Misnal Munir, Filsafat Ilmu, Pustaka Pelajar. Yogyakarta, 2003
- Sudiarja, A., dkk. (ed.), 2006, Karya Lengkap Driyarkara, Jakarta: Gramedia Pustaka Utama
- Sugiharto, Bambang. 2013. Untuk Apa Seni?. Bandung: Pustaka Matahari
- Suryajaya, Martin, 2016, Sejarah Estetika, Jakarta Barat: Gang Kabel

Appendix Task Guidelines and Rubrics 2

	UNIVERSITAS BRAWIJAYA FACULTY OF CULTURAL STUDIES DEPARTMENT OF LANGUAGE EDUCATION STUDY PROGRAMME OF INDONESIAN LANGUAGE AND LITERATURE EDUCATION				
STUDENT TASK GUIDELINE					
COURSE TITLE	Philosophy of Science				
CODE	SBF60002	CREDITS	2	SEMESTER	4
LECTURER OF THE COURSE	Yohanes Padmo Adi Nugroho, S.S., M.Hum.				
TASK FORM					
Midterm Examination					
COURSE LEARNING OUTCOME					

1. Being able to understand various philosophical concepts and theories, their position, focuses, scopes, goals, and functions so that they can be used as a rationale for planning and developing science
2. Being able to understand the philosophy of science as a means of self-development as a scientist who has a basic vision and orientation of philosophy based on values, morals, and academic ethics

DESCRIPTION

Students answer the questions according to the materials and theories given during the first mid semester. There will be 5 questions, students may choose three of them.

METHOD OF COMPLETION

1. There are 5 questions according to the materials and theories given during the first mid semester.
2. Students elaborate their answers, write down their understandings, and explain them.
3. The question sheet will be sent to the students by Telegram group.
4. Students answer the questions themselves.
5. The answer sheet will be saved in pdf.
6. The pdf. file will be sent by google form.

OUTCOMES

1. Students understand the categories of truth between Science, Philosophy, and Religion
2. Students understand the Truth through Phenomenology of Religion
3. Students understand tree of knowledge and integration of sciences
4. Students understand empiricism and rationalism
5. Students understand structuralism and poststructuralism

INDICATORS, CRITERIA, AND PERCENTAGE OF GRADING

ASPECT	DESCRIPTOR	Score			
		1	2	3	4
Understanding	Students understand the basic concept of science philosophy				

	and the discourses about it.				
Genuine	They do the test themselves and the answers are not plagiarism.				
Responsibility	Students do the test in the time given.				

TIMES


Meeting 8

OTHERS : -

REFERENCES

- Gardner, Jostein, 1996, Dunia Sophie, Bandung: Mizan
Hadiwijono, Harun, 1980, Sari Sejarah Filsafat Barat 1, Yogyakarta: Kanisius
Hadiwijono, Harun, 1980, Sari Sejarah Filsafat Barat 2, Yogyakarta: Kanisius
K. Bertens, 2002, Filsafat Barat Kontemporer, Inggris-Jerman, Jakarta: Gramedia Pustaka Utama
Keraf, A. (2001). Sony dan Mikhael Dua. Ilmu Pengetahuan. Sebuah Tinjauan Filosofis. Yogyakarta Penerbit Kanisius.
Madjid, Nurcholish (ed.), 1999, Passing Over: Melintas Batas Agama, Jakarta: Gramedia
Palmquist, Stephen. Pohon Filsafat. Pustaka Pelajar
Tim Redaksi Driyarkara (ed.) Hakikat Pengetahuan: Cara Kerja Ilmu-ilmu, Jakarta: Gramedia, 1993
Tjahjadi, S. P. L. (2004). Petualangan Intelektual. Yogyakarta: Kanisius.
Wibisono, Koento, 1983, Arti Perkembangan Menurut Filsafat Positivisme Auguste Comte, Yogyakarta: Gajah Mada University Press

Appendix Task Guidelines and Rubrics 3

	<p>UNIVERSITAS BRAWIJAYA FACULTY OF CULTURAL STUDIES DEPARTMENT OF LANGUAGE EDUCATION STUDY PROGRAMME OF INDONESIAN LANGUAGE AND LITERATURE EDUCATION</p>				
<p>STUDENT TASK GUIDELINE</p>					
<p>COURSE TITLE</p>	<p>Philosophy of Science</p>				
<p>CODE</p>	<p>SBF60002</p>	<p>CREDITS</p>	<p>2</p>	<p>SEMESTER</p>	<p>4</p>
<p>LECTURER OF THE COURSE</p>	<p>Yohanes Padmo Adi Nugroho, S.S., M.Hum.</p>				
<p>TASK FORM</p>					
<p>Final Examination/Final Paper</p>					
<p>COURSE LEARNING OUTCOME</p>					
<ol style="list-style-type: none"> 1. Being able to apply the philosophy of science as the basis for a logical, critical, systematic framework of thinking 2. Being able to understand the implications of the development of science by applying humanities values 					
<p>DESCRIPTION</p>					

Students discuss in their own study groups about one topic within the scope of Philosophy of Science. They may choose a discourse or a philosopher to discuss.

METHOD OF COMPLETION

1. Students discuss in their own study group about the discourse of Science Philosophy or a Philosopher.
2. Students write down on paper, 5-7 pages, TNR12, spacing 1.5.
3. Students submit the paper by google form.

OUTCOMES

1. Students understand one discourse of science philosophy or the thinking of one philosopher.
2. Students are able to articulate the discourse/thinking.

INDICATORS, CRITERIA, AND PERCENTAGE OF GRADING

ASPECT	DESCRIPTOR	Score			
		1	2	3	4
Understanding	Students understand one discourse of science philosophy or the thinking of one philosopher				
Activity	Students actively discuss in their own study group.				
Communication	Students communicate the idea in their own study group as well as in the class.				

Genuine	They do the test themselves and the answers are not plagiarism.				
Responsibility	Students do the test in the time given.				

TIMES

Meeting 16

OTHERS :-

REFERENCES

- Dewantara, Ki Hajar, 2009, Menuju Manusia Merdeka, Yogyakarta: Leutika
- Dhavamony, Mariasusai, 1995, Fenomenologi Agama, Yogyakarta: Kanisius
- F. Budi Hardiman, 2004, Filsafat Modern, dari Machiavelli sampai Nietzsche, Yogyakarta, Jakarta: Gramedia Pustaka Utama
- Freire, Paulo, 2000, Pedagogy of Freedom: Ethics, Democracy, and Civic Courage (Critical Perspectives Series: A Book Series Dedicated to Paulo Freire), translated by Patrick Clarke, New York: Rowman & Littlefield Publishers, Inc.
- Kaelan, 1998, Filsafat Bahasa: Masalah dan Pengembangannya, Yogyakarta: Paradigma
- Mustansyir, Rizal dan Misnal Munir, Filsafat Ilmu, Pustaka Pelajar. Yogyakarta, 2003
- Sudiarja, A., dkk. (ed.), 2006, Karya Lengkap Driyarkara, Jakarta: Gramedia Pustaka Utama
- Sugiharto, Bambang. 2013. Untuk Apa Seni?. Bandung: Pustaka Matahari
- Suryajaya, Martin, 2016, Sejarah Estetika, Jakarta Barat: Gang Kabel