

**PROGRAM PLAN AND
SEMESTER LEARNING
ACTIVITIES
(RPKPS)
SCHOOL YEAR
2021/2022**



Geophysics Philosophy
of Physics
MFF 1015/ 2 credits

Mentoring Team:

Dr. Arief Hermanto

**UNIVERSITAS GADJAH
MADA FACULTY OF
MATHEMATICS AND
NATURAL SCIENCES
2021**



Gadjah Mada University
 Faculty of Mathematics and Natural Sciences
 Department of Physics / S1 Geophysics Study
 Program Academic Year 2021/2022


Document Code:

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SEMESTER LEARNING PROGRAM AND ACTIVITY PLAN (RPKPS)

Course Code	Course Name	Weight (credit)		Semester	Course Status	Prerequisite Courses				
MFF 1015	Philosophy of	T: 2	P:	Odd	Choice	-				
Course Brief Description	This course is not technically mathematical, but verbally analytically logical. Learning is carried out face-to-face and giving literature study assignments (and then presenting them) to students. Assessment is given in a balanced manner between midterm exams, end-of-term exams and assignments.									
Graduate Learning Outcomes (CPL) Charged in MK	CPL-2	Mastery of general knowledge: Graduates are able to apply basic science (mathematics, physics, chemistry, biology, geology), and geophysics in general and their relationship with other sciences such as geology, geodesy, geochemistry, geography, computing and information technology.								
Course Learning Outcomes (CPMK)	After completing the learning of this course, students are expected to be able to:									
	CPMK-1	Students can express both orally and in writing various topics that are quite in-depth in the theory of relativity, quantum theory and the fundamental differences between them based on the study of literature, not by mathematical equations but by the qualitative power of analytical-logical verbal expressions								
CPL Mapping with CPMK	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td>CPMK1</td> </tr> <tr> <td>CPL-1</td> <td></td> </tr> </table>							CPMK1	CPL-1	
	CPMK1									
CPL-1										
The Relationship of CPMK with Learning Materials and Forms, as well as Time Allocation	CPMK	Learning Materials			Forms of Learning	Time Allocation				
	CPMK-1	logic			TCL - SCL mixed	2 Hours				
	CPMK-1	logic			TCL - SCL mixed	2 Hours				
	CPMK-1	logic			TCL - SCL mixed	2 Hours				
	CPMK-1	Relativity			TCL - SCL mixed	2 Hours				
	CPMK-1	Relativity			TCL - SCL mixed	2 Hours				
	CPMK-1	Relativity			TCL - SCL mixed	2 Hours				
	CPMK-1	Logic and relativity								
	UTS/Project Task Results/Case Analysis Results									
	CPMK-1	Quantum			TCL - SCL mixed	2 Hours				
	CPMK-1	Quantum			TCL - SCL mixed	2 Hours				
CPMK-1	Quantum			TCL - SCL mixed	2 Hours					

	CPMK-1	Comparison of quantum and relativity	TCL - SCL mixed	2 Hours
	CPMK-1	Comparison of quantum and relativity	TCL - SCL mixed	2 Hours
	CPMK-1	Comparison of quantum and relativity	TCL - SCL mixed	2 Hours
	CPMK-1	Quantum and quantum-relativity comparison	TCL - SCL mixed	2 Hours
UAS/ Project Task Results/ Case Analysis				
Learning Methods	TCL - SCL mixed			
Student Learning Experience	Study, discussion, Q&A			
Access to Learning Media an/ LMS and Offline & Online Percentage	Slides and reference books			
Assessment Methods and Alignment with CPMK	Assessment Techniques	Assessment Percentage	Criteria/ Indicators	CPMK-1
	Participatory Activities*)			
	Project Results / Case Study / PBL Results*)			
	Cognitive			
	Assignment	30	Task grades	
	Quiz			
	UTS	30	UTS scores	
	UAS	40	UAS value	
	Total	100		
	*) can also be obtained from UTS or UAS which is the result of participatory activities or <i>project / case study</i> results. In accordance with IKU 7, the percentage of participatory activities and project results/case studies/PBL results is at least 50%.			
Reference List	<ol style="list-style-type: none"> 1. Ladyman J, 2002, Understanding Philosophy of Science, Routledge, London. 2. G Holton and S G Brush, 2005, Physics, The Human Adventure, Rutgers Univ Press, USA. 3. A Hermanto, 2012, Teaching Material for Philosophy of Physics, FMIPA-UGM 			

Name of Lecturer (Team Teaching)	Dr. Arief Hermanto, SU.			
Authorization	Drafting Date	Course Coordinator	Coordinator of Expertise (if applicable)	Head of Study Program
	2020			 Dr.. Sudarmaji,MSi