

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



Physical Geophysics

Real Work Lecture

UNU 4500 / 3 credits

Mentoring Team:  
Supervisor(s)

**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
UNU 4500	<i>Real Work Lecture</i>	<i>T: 3</i>	<i>P: -</i>	<i>Complete</i>	<i>Mandatory</i>	<i>Minimum 100 credits</i>

**Course Brief Description**

<b>Graduate Learning Outcomes (CPL) Charged to MK</b>	<b>CPL-1</b>	<b>Good Attitude:</b> Graduates are honest, disciplined, curious, critical, confident, independent, emotionally mature, cooperative, and trustworthy. Uphold norms, values, morals, religion, general ethics and professional ethics, and actively play a role in the global movement of sustainable development and behave professionally
	<b>CPL-2</b>	<b>Mastery of general knowledge:</b> 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.
	<b>CPL-3</b>	<b>Operational and comprehensive skills:</b> Graduates are able to apply all geophysical methods (seismic, gravitational, magnetic, electrical, electromagnetic, and thermic methods) for energy exploration (e.g. oil and gas, coal, geothermal), mining materials (eg: iron, copper, gold, silver, tin) as well as groundwater and disaster mitigation
	<b>CPL-4</b>	<b>Application and analysis skills:</b> Graduates are able to carry out and manage a geophysical survey which includes scientific steps in the acquisition, processing and interpretation of data for the exploration of natural resources both for energy (e.g. oil and gas, coal, for energy exploration (e.g. oil and gas, coal, geothermal), mining materials (eg: iron, copper, gold, silver, tin) as well as groundwater and disaster mitigation.
	<b>CPL-5</b>	<b>Synthesis and Evaluation Skills:</b> Graduates are able to interpret geophysical data in the form of solving advanced and reverse problems (inverse problems) in an integrated manner that have ambiguous characters, carry out interpretation by making models and / or solving simple forward and reverse problems and are skilled in the use of computers both for the purposes of solving geophysical problems and for communication and internet access.
	<b>CPL-6</b>	<b>Managerial skills and self-development:</b> Graduates are able to update their competencies, namely by life-long learning in line with the latest geophysical conditions to compete nationally and internationally by upholding UGM values (Pancasila: Divinity, Humanity, Unity, Peoplehood, Justice, and Science: universality, objectivity, freedom, respect for reality and truth)

<b>Learning Outcomes</b>	<b>After completing the learning of this course, students are expected to be able to:</b>	
	<b>CPMK-1</b>	[CPL-1, CPL-7]

<b>Course (CPMK)</b>													
<b>CPL mapping with CPMK</b>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td><b>CPMK1</b></td> </tr> <tr> <td>CPL-1</td> <td></td> </tr> <tr> <td>CPL-7</td> <td></td> </tr> </table>								<b>CPMK1</b>	CPL-1		CPL-7	
	<b>CPMK1</b>												
CPL-1													
CPL-7													
<b>CPM K link with Learning Materials and Forms , as well as Time Allocation</b>		<b>Learning Materials</b>		<b>Forms of Learning</b>		<b>Time Allocat</b>							
	<i>CPMK 1</i>	Preparation				1 Month							
	<i>CPMK 1</i>	Work and serve in the Village				2 Months							
	<i>CPMK 1</i>	Create a report				2 Weeks							
<b>UAS/ Project Task Results/ Case Analysis</b>													
<b>Learning Methods</b>													
<b>Student Learning Experience</b>	Discuss, cooperate, dedicate, socialize, make reports and tests												
<b>Access Learning Media / LMS and Offline &amp; Online Percentage</b>	LCD, Paper, Laptop/computer, assisted village												
<b>Assessment Methods and Alignment with CPMK</b>	<b>Assessment Techniques</b>	<b>Assessment Percentage</b>	<b>Criteria/ Indicator</b>	<b>CPMK-1</b>	<b>CPMK-2</b>	<b>CPMK -3</b>	<b>CPMK -4</b>						
	<b>Participatory Activities<sup>*)</sup></b>												
	<b>Project Results/Has il Case Study/ PBL Results<sup>*)</sup></b>												
	<b>Cognitive</b>												
	<b>Assignment</b>												
	<b>Quiz</b>												
	<b>UTS</b>												
	<b>UAS</b>												
	<b>Total</b>	<b>100</b>											

	*) 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, <b>the percentage of</b> participatory activities and project results/case studies/PBL results is at least 50%.			
<b>Reference List</b>				
<b>Name of Lecturer Pengampu (Team)</b>	Supervisor(s)			
<b>Authorization</b>	<b>Drafting Date</b>	<b>Course Coordinator</b>	<b>Coordinator of Expertise (if applicable)</b>	<b>Head of Study Program</b>
	2020			 Dr. Sudarmaji, MSi