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

Geophysics Practical Work
MFG 3122 / 2 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:** .....

SEMESTER LEARNING PROGRAM AND ACTIVITY PLAN (RPKPS)

Course Code	Course Name	Weight (credit)		Semester	Course Status	Prerequisite Courses
MFG 3122	Internship	*T :*	*P: -*	Complete	*Mandatory*	*Minimum 80 credits*

Course Brief Description	After participating in practical work, students can get to know real jobs for geophysicists. Field work practice in companies or institutions that are closely related to geophysics for approximately 1-2 consecutive months.	
Graduate Learning Outcomes (CPL) Charged to MK	***CPL-1***	**Good Attitude**: 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
	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.
	CPL-3	**Operational and comprehensive skills**: 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
	CPL-4	**Application and analysis skills**: 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.
	CPL-5	**Synthesis and Evaluation Skills:** 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.
	CPL-6	**Managerial skills and self-development**: 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)
Course Learning Outcomes (CPMK)	**After completing the learning of this course, students are expected to be able to:**	
	CPMK-1	Cultivate a good and professional attitude [CPL-1]

<table>
<tr><td></td><td>CPMK-2</td><td>Students gain field experience to practice general knowledge and operational skills [CPL-1, CPL-2]</td></tr>
<tr><td></td><td>CPMK-3</td><td>Students gain field experience in the implementation of application skills, analysis, synthesis and evaluation [CPL-3, CPL-4]</td></tr>
<tr><td></td><td>CPMK-4</td><td>Students gain field experience in honing managerial skills and developing themselves [CPL-6]</td></tr>
<tr><td>CPL mapping with CPMK</td><td colspan="2">
<table>
<tr><th></th><th>CPMK-1</th><th>CPMK-2</th><th>CPMK-3</th><th>CPMK-4</th></tr>
<tr><td>CPL-1</td><td>√</td><td></td><td></td><td></td></tr>
<tr><td>CPL-2</td><td></td><td>√</td><td></td><td></td></tr>
<tr><td>CPL-3</td><td></td><td>√</td><td></td><td></td></tr>
<tr><td>CPL-4</td><td></td><td></td><td>√</td><td></td></tr>
<tr><td>CPL-5</td><td></td><td></td><td>√</td><td></td></tr>
<tr><td>CPL-6</td><td></td><td></td><td></td><td>√</td></tr>
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<tr><td>CPMK link with Learning Materials and Forms, as well as Time Allocation</td><td colspan="2">
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<tr><th></th><th>Learning Materials</th><th>Forms of Learning</th><th>Time Allocation</th></tr>
<tr><td>CPMK-1</td><td>Cultivate a good and professional attitude at work</td><td>Mentoring and Assignment</td><td rowspan="4">100 hours of work or 25 working days</td></tr>
<tr><td>CPMK-2</td><td>Implementation of general knowledge and operational</td><td>Mentoring and Assignment</td></tr>
<tr><td>CPMK-3</td><td>Application, analysis, synthesis and evaluation</td><td>Mentoring and Assignment</td></tr>
<tr><td>CPMK-4</td><td>Develop managerial skills and self-development</td><td>Mentoring and Assignment</td></tr>
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<tr><td>Learning Methods</td><td colspan="2"></td></tr>
<tr><td>Student Learning Experience</td><td colspan="2">Practice professional work, make work plans, conduct data analysis, write work reports, draw conclusions from activities, presentations</td></tr>
<tr><td>Access Learning Media / LMS and Offline &; Online Percentage</td><td colspan="2">Laptop/Computer, Paper</td></tr>
<tr><td>Assessment Methods and Alignment with CPMK</td><td colspan="2">
<table>
<tr><th>Assessment Techniques</th><th>Assessment Percentage</th><th>Criteria/ Indicators</th><th>CPMK-1</th><th>CPMK-2</th><th>CPMK -3</th><th>CPMK -4</th></tr>
<tr><td>Participatory Activities*)</td><td>50</td><td>Supervisor Assessme</td><td>√</td><td>√</td><td>√</td><td>√</td></tr>
<tr><td>Project Results/Case Study Results/PBL Results*)</td><td>50</td><td>Reports and presentations</td><td>√</td><td>√</td><td>√</td><td>√</td></tr>
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	Cognitive						
	Assignment						
	Quiz						
	UTS						
	UAS						
	Total	**100**					
	[*)] can also be obtained from UTS or UAS which is the result of participatory activities or *project* / case study results. In accordance with IKU 7, **the percentage of** participatory activities and project results/case studies/PBL results is at least 50%.						
Reference List							
Name of Lecturer (*Team Teaching*)	The team of lecturers appointed by the Geophysics Study Program						
Authorization	**Drafting Date**	**Course Coordinator**	**Coordinator of Expertise (if applicable)**	**Head of Study Program**			
	2022	Lecturer Team		 Dr. Sudarmaji, MSi			