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

Geophysical

Stratigraphy

MFG 4613/ 2 credits

Mentoring Team:

Mochamad Nukman, Sintia Windhi Niasari

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)		Semeste r	Course Status	Prerequisite Courses
MFG 4613	*Stratigraphy*	*T: 2*	*P: -*	*Odd*	*Choice*	*Basic Geology*

Course Brief Description	This course equips students on: a) definitions and types of stratigraphy; b) geological time scales; c) stratigraphic relationships with tectonics and sedimentation and stratigraphy; and d) the settling environment.	
	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.
Course Learning Outcomes (CPMK)	**After completing the learning of this course, students are expected to be able to:**	
	CPMK-1	Students are able to make stratigraphic correlations. [CPL-2]
	CPMK-2	Students are able to recognize the deposition environment from its characteristics. [CPL-3]

CPL mapping with CPMK

	CPMK1	CPMK2
CPL-2		
CPL-3		

The Relationship of CPMK with Learning Materials and Forms, as well as Time Allocation		Learning Materials	Forms of Learning	Time Allocation
	CPMK-1	Introduction: definition and types of stratigraphy	TCL - SCL mixed	2 Hours
	CPMK-1	Geologic time scale	TCL - SCL mixed	2 Hours
	CPMK-1	Tectonics and sedimentation	TCL - SCL mixed	2 Hours
	CPMK-1	Terrestrial depositional environment	TCL - SCL mixed	8 Hours
	UTS/ Project Task Results/ Case Analysis			
	CPMK-2	Transitional deposition environment	TCL - SCL mixed	6 Hours
	CPMK-2	Depositional environment	TCL - SCL mixed	8 Hours

		Sea		
	UAS/ Project Task Results/ Case Analysis			
Learning Methods	TCL - SCL mixed			
Student Learning Experience	Listening, asking questions, doing assignments and quizzes (stratigraphic correlation).			
Access Learning Media / LMS and Offline &; Online Percentage	Presentation Slides, Simaster (e-learning), 100% offline			

Assessment Methods and Alignment with CPMK

Assessment Techniques	**Assessment Percentage**	**Criteria/ Indicators**	**CPMK-1**	**CPMK-2**		
Participatory Activities *)						
***Project Results*/Hasil Case Study/ PBL Results**[*)]						
Cognitive						
Assignment	25	Answer key				
Quiz	25	Answer key				
UTS	25	Answer key				
UAS	25	Answer key				
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	Boggs, S., 2006, Principles of Sedimentology and Stratigraphy: New Jersey, Pearson Education, Inc., 662 p. Tucker, M.E., 2011, Sedimentary Rocks in the Field (fourth edition): West Sussex, John Wiley and Sons, Ltd., 275 p.
Name of Lecturer (*Team Teaching*)	Mochamad Nukman, Sintia Windhi Niasari

Authorization	**Drafting Date**	**Course Coordinator**	**Coordinator of Expertise (if applicable)**	**Head of Study Program**

	August 16 2022			 Dr. Sudarmaji, MSi