COURSE PORTFOLIO

Study Program : GEOPHYSICS - S1
Semester : EVEN 2023/2024
Course Code : 23H06110302

Course Name : Geomechanics

Coordinator : Ir. Bambang Hari Mei Soeprapto, M.Si.

Lecturer Team Member Dra. Maria, M.Si., Dr. Muhammad Hamzah S., S.Si.,MT., Drs.

Erfan, M.Si., Prof. Dr. Eng. Amiruddin, S.Si, M.Si.

Implementation of Learning

Description of the implementation of the lecture, the suitability of what was planned in the RPS with what was done:

Number and percentage of lecturer and student attendance

(data source: monitoring the attendance of lecturers and students)

	Lecturer Attendance			Student Attendance
	Prof. Dr. Eng. Amiruddin, S.Si, M.Si.	:	times	Number of students, 70
GEOMECHANICS (A)	Drs. Erfan, M.Si.	:	times	Number of students: 78 persons
	Dra. Maria, M.Si.	:	times	Presence ≥ 80% : Presence < 80% :
	Total Meeting : times.			riesence < 00 %.
GEOMECHANICS (B)	Prof. Dr. Eng. Amiruddin, S.Si, M.Si.	:	times	
	Dr. Muhammad Hamzah S., S.Si.,MT.	:	times	Number of students: 73 persons
	Drs. Erfan, M.Si.	:	times	Presence ≥ 80% : Presence < 80% :
	Total Meeting : times.			

Materials/practicum provided

Learning materials in the geomechanics course are:

- 1. The origin of the formation of the earth, the age of the earth, the formation of the solar system, the earth-moon system, the time of core formation.
- 2. Travel time and velocity-depth curve, Free oscillations of the earth, density variations and physical properties of the earth, Mantle core boundaries.
- 3. Formation of the earth's core, experimental methods, abundance of elements, formation of the outer core.

- 4. Composition of the earth's crust, Chemical elements of the lithosphere
- 5. Subsurface waves, Tomography
- 6. Melting point at depth, adibatic temperature, Thermal regime of the earth's core, Geothermal history.
- 7. Fourier's Law, Measurement of heat flow, Earth's surface heat flow, Convection currents.
- 8. Heat in radioactive decay, Heat in continents
- 9. Compensation model, Geoid Anomaly
- 10. Topographic forming style, Geoid
- 11. Elasticity and plasticity, Mantle rheology, Mantle convection, Earth cooling
- 12. Crustal rheology, viscoelasticity, elastic and plastic properties of the earth's crust
- 13. Geochronology and radioactivity, Reservoir geochemistry, Noble gas systems

The learning methods implemented

The learning methods used for the geomechanics course are: 1. Group discussion (Small Group Discussion)

- 2. Cooperative learning (Cooperative learning)
- 3. Case Study
- 4. Paper creation and PPT creation
- 5. Self-Directed Learning
- 6. Lecture reconstruction

The assessment method implemented

1. Task

Supplementary information (if available)

None

2. Learning Outcomes

Measurement results of CLO

Assessment and Evaluation of Student Achievement of CLO^a

LOs that are charged to the Course	CLO	Assessment Form	Weight	Average student score (0-100)
P1	CLO-1	Task	100.00 %	82.58
P1	CLO-1	Task	100.00 %	82.58
KU1	CLO-2	Task	100.00 %	82.58
KU1	CLO-2	Task	100.00 %	82.58
KU1	CLO-3	Task	100.00 %	82.58

LOs that are charged to the Course	CLO Assessment Form		Weight	Average student score (0-100)	
KU1	CLO-3	Task	100.00 %	82.58	
KK1	CLO-2	Task	100.00 %	82.58	
KK1	CLO-2	Task	100.00 %	82.58	
KK1	CLO-3	Task	100.00 %	82.58	
KK1	CLO-3	Task	100.00 %	82.58	
KK3	CLO-2	Task	100.00 %	82.58	
KK3	CLO-2	Task	100.00 %	82.58	
KK3	CLO-3	Task	100.00 %	82.58	
KK3	CLO-3	Task	100.00 %	82.58	

a: result criteria: very satisfactory if the average score is ≥ 80; satisfactory if the average score is 70 - 79.9; unsatisfactory if the average score is < 70

Percentage of students who achieved a very satisfactory CLO score b

(data source: student scores per assessment according to CLOs)

CLO	% of students who achieved a CLO score of at least 80
	70 of students with definered a OLO Soore of at least of
CLO-1	87.42%
CLO-2	0.00%
CLO-3	0.00%
CLO-1	87.42%
CLO-2	0.00%
CLO-3	0.00%
CLO-1	0.00%
CLO-2	87.42%
CLO-3	87.42%
CLO-1	0.00%
CLO-2	87.42%
CLO-3	87.42%

b: result criteria: very satisfactory if ≥80% of students score ≥80; satisfactory if 70%-79.9% of students score ≥80; less satisfactory if < 70% of students score ≥80.

Course Grade

Course Grade	Number and Percentage of Students
A	59 (39.1%)
A-	73 (48.3%)

Number and Percentage of Students		
16 (10.6%)		
0 (0.0%)		
0 (0.0%)		
0 (0.0%)		
0 (0.0%)		
2 (1.3%)		
1 (0.7%)		
	16 (10.6%) 0 (0.0%) 0 (0.0%) 0 (0.0%) 2 (1.3%)	

3. Learning evaluation (survey) results

(data source: items / narratives of the results of the MK evaluation questionnaire by students) -

4. Analysis and Reflection

None

5. Follow-up Plan

None

6. Follow-up results on the previous semester's evaluation

None

Makassar, 24 Oktober 2025

Ir. Bambang Hari Mei Soeprapto, M.Si. NIP 196105011990031003