COURSE PORTFOLIO

Study Program : GEOPHYSICS - S1
Semester : EVEN 2024/2025

Course Code : 23H06121702

Course Name : Geodynamics (P1)

Coordinator : Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv.

Lecturer Team Member Makhrani, S.Si. M.Si, Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv.,

Andi Muhammad Pramatadie, S.T., M.Eng., Ph.D

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
Geodynamics (P1)	Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv.	:	6 times	
	Makhrani, S.Si. M.Si		5	Number of students: 51 persons Presence ≥ 80% : 49 persons (96.08 %) Presence < 80% : 3 persons (5.88 %)
		:	times	
	Andi Muhammad Pramatadie, S.T., M.Eng., Ph.D	:	5 times	
	Total Meeting : 16 times.			

Materials/practicum provided

Material given in the Geodynamics course:

- 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

Learning methods in courses Geodynamics:

- 1. Group discussion (Small Group Discussion)
- 2. Learning learning)
- 3. Case Study
- 4. Self-Directed Learning
- 5. Lecture Reconstruction

The assessment method implemented

- 1. Midterm exam
- 2. Project/Case Study
- 3. Final exams

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)
KU1	CLO-1	Project/Case Study	49.23 %	92.79
KU1	CLO-1	Midterm exam	23.08 %	82.88
KU1	CLO-1	Final exams	12.31 %	84.99
KU1	CLO-1	Project/Case Study	15.39 %	84.72
KU2	CLO-2	Midterm exam	23.08 %	82.88
KU2	CLO-2	Final exams	12.31 %	84.99

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
CLO-1	92.16%
CLO-2	78.43%

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
А	39 (76.5%)
A-	10 (19.6%)
B+	2 (3.9%)
В	0 (0.0%)
B-	0 (0.0%)
C+	0 (0.0%)
С	0 (0.0%)
D	0 (0.0%)
E	0 (0.0%)

3. Learning evaluation (survey) results

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

4. Analysis and Reflection

Gagal diterjemahkan

5. Follow-up Plan

None

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

None

Makassar, 24 Oktober 2025

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