

COURSE PORTFOLIO

Study Program	: GEOPHYSICS - S1
Semester	: ODD 2023/2024
Course Code	: 23H06120703
Course Name	: Geophysical Fluid Dynamics
Coordinator	: Dr. Muhammad Alimuddin, Eng.
Lecturer Team Member	: Saaduddin. S.Pd., M.Sc, 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
GEOPHYSICAL FLUID DYNAMICS (A)	Prof. Dr. Eng. Amiruddin, S.Si, M.Si. : times	Number of students: 40 persons
	Saaduddin. S.Pd., M.Sc : times	Presence $\geq$ 80% : Presence < 80% :
	Total Meeting : times.	
GEOPHYSICAL FLUID DYNAMICS (B)	Prof. Dr. Eng. Amiruddin, S.Si, M.Si. : times	Number of students: 37 persons
	Saaduddin. S.Pd., M.Sc : times	Presence $\geq$ 80% : Presence < 80% :
	Total Meeting : times.	

Materials/practicum provided

Learning Materials for the Geophysical Fluid Dynamics Course

1. Various types of Density and Density, and Viscosity.
2. Compressibility and Elasticity, and Surface Tension.
3. Fluid Statics: Hydrostatic, Hypometric Equations, Air Column Stability, and Hydrostatic Pressure on a Plane Plane.
4. Stability of Objects, Archimedes' Principle, and Specific Gravity.
5. Fluid Kinematics: Several Definitions Describing Fluid Motion, Total Derivatives (Derived Materials), Conservation of Mass, and Movement by Rotation.
6. Vortex Field, Velocity Potential, Flow Function, and Deformation.

7. Fluid Dynamics: Flow Without the Effect of Friction, Euler's Equations, and Application of Euler's Equations to Fluids in Moving Solid Objects.

8. Bernoulli's Equation, Application of Bernoulli's Equation to Pitot Tube Problems, and Bernoulli's Equation for Steady, Irrotational, and Compressible Flows

9. Viscous Fluids and Viscous Fluid Equations of Motion (Navier-Stokes Equations)

The learning methods implemented

Learning Methods for Geophysical Fluid Dynamics Courses

1. Group discussion (Small Group Discussion)

2. Case Study

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)
KU3	CLO-2	Task	100.00 %	75.08
P2	CLO-1	Task	100.00 %	75.08
KK1	CLO-3	Task	100.00 %	75.08

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	74.03%
CLO-2	74.03%
CLO-3	74.03%

b: result criteria: very satisfactory if $\geq 80\%$ 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	31 (40.3%)
A-	26 (33.8%)

Course Grade	Number and Percentage of Students
B+	4 (5.2%)
B	0 (0.0%)
B-	0 (0.0%)
C+	1 (1.3%)
C	9 (11.7%)
D	1 (1.3%)
E	5 (6.5%)

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

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