# SEMESTER COURSE PLAN

**FIELD LECTURES COURSES**
**(23H06130502)**

**TEACHING TEAM**


Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv.
196406161989031006

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

Dr. Muhammad Hamzah S., S.Si.,MT.
196912311997021002

Drs. Erfan, M.Si.
196709032001121001

Syamsuddin, S.Si.,MT.
197401152002121001

Sabrianto Aswad, S.Si., MT
197805242005011002

Muhammad Fawzy Ismullah Massinai, S.Si, M.T
199111092019031010

Aswar Syafnur, S.Si., M.Eng
199312152021115001

Dr. Muhammad Taufiq Rafi
199502072022115001

Saaduddin. S.Pd., M.Sc
198903202022043001

Andi Muhammad Pramatadie, S.T., M.Eng., Ph.D
198803242022055001

Andika, S.Si., M.Si.
7306062804970003

STUDI PROGRAM OF GEOPHYSICS - S1
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
HASANUDDIN UNIVERSITY
MAKASSAR
2025

**STUDY PROGRAM OF GEOFISIKA - S1**
**FACULTY OF MATHEMATICS AND NATURAL SCIENCES**
**HASANUDDIN UNIVERSITY**

## Vision

Become a program Reliable studies in the field of geophysics to produce superior graduates and mastering science, technology, arts and culture based on BMI in 2030.

## Vision Strategy

## Misson

Based on the Vision above, the Geophysics Study Program has a mission:

1. Improving the quality of education to produce graduates who are competitive, able to work independently and in groups in implementing and developing BMI science and technology;

2. Carrying out research to produce reliable and competitive scientific work oriented towards the scientific development of solid geophysics, marine geophysics, geoinformatics and hydro-meteorology;

3. Disseminate the results of applied research, action studies and appropriate technology packages in synergistic and accelerated productive activities to improve the quality of life of the community.

## Graduate Profiles

Educators in the Field of Geophysics; meteorologist; geomaths; oceanographer; exploration geophysicist; seismologist ; geophysical entrepreneur.

## PLO charged to courses

CPL-8 (KU1) - Able to apply logical, critical, systematic and innovative thinking in developing or applying geophysical science by considering human values, and able to analyze and communicate case studies and research results using geophysical tools through scientific reports, international presentations and article publications, as well as uploading them on the university website.

CPL-9 (KU2) - Able to demonstrate independent, quality and measurable performance in maintaining professional collaboration with supervisors and colleagues at national and international levels, as well as completing tasks responsibly using relevant modern geophysical tools

CPL-12 (KK2) - Able to discover new natural resources through a process of exploration, analysis, interpretation of data and information based on environmentally friendly exploration geophysical principles

CPL-14 (KK4) - Able to investigate potential natural resources and utilize appropriate information and computing technology-based instruments to carry out natural resource exploration and natural disaster mitigation activities

## Course Learning Outcomes (CLO)

CPMK-1: Students are able to carry out data acquisition using geophysical methods, data processing and data interpretation (CPL8 dan CPL9)

CPMK-2: Able to apply geophysical methods for various purposes (CPL12 dan CPL14)

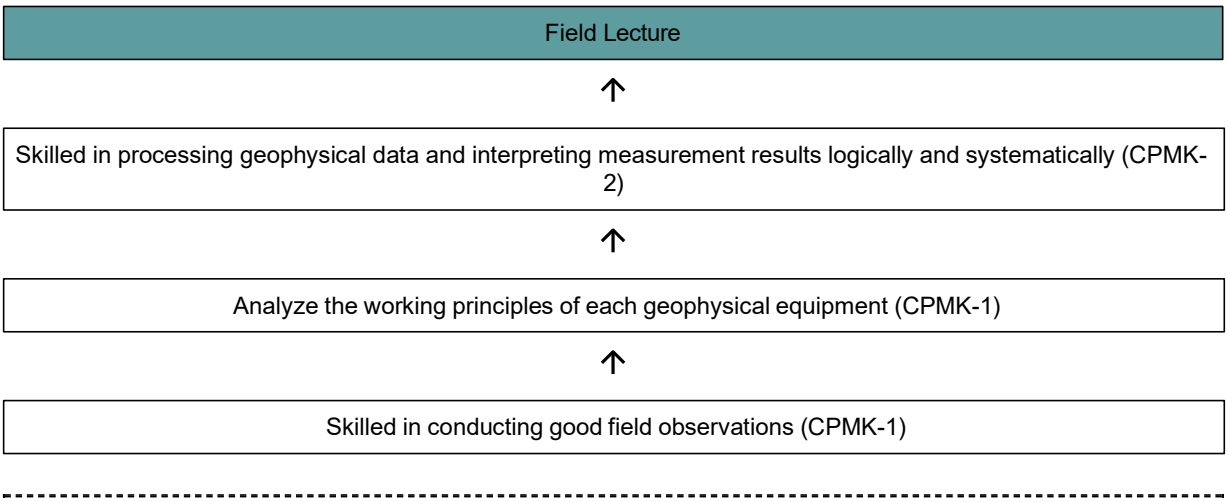
## Sub-CLO

Sub CPMK-1: Skilled in conducting good field observations (CPMK-1)

Sub CPMK-2: Analyze the working principles of each geophysical equipment (CPMK-1)

Sub CPMK-3: Skilled in processing geophysical data and interpreting measurement results logically and systematically (CPMK-2)

# Learning Analytics



# HASANUDDIN UNIVERSITY
## FAKULTY OF MATHEMATICS AND NATURAL SCIENCES
## STUDY PROGRAM OF GEOPHYSICS - S1
# SEMESTER LEARNING PLAN

| Course | Code | Cource Group | Credits | SEMESTER | Compilation Date |
|---|---|---|---|---|---|
| Field Lecture | 23H06130502 | Geophysics | 2 | 5 | 1 Juli 2025 |

| AUTHORITY | SLP Developer Lecturer | Coordinator | Head of Study Program |
|---|---|---|---|
| | Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv., Dr. Sakka, M.Si., Sabrianto Aswad, S.Si., MT | Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv. | Dr. Muhammad Alimuddin, Eng. |

| | | |
|---|---|---|
| **Learning Outcomes Course** | **SLOs that are imposed on the course** | |
| | **SLO-8:** | Mampu menerapkan pemikiran logis, kritis, sistematis, dan inovatif dalam mengembangkan atau menerapkan ilmu geofisika dengan mempertimbangkan nilai-nilai kemanusiaan, serta mampu menganalisis dan mengkomunikasikan studi kasus dan hasil penelitian menggunakan perangkat geofisika melalui laporan ilmiah, presentasi internasional, dan publikasi artikel, serta mengunggahnya pada laman universitas. |
| | **SLO-9:** | Mampu menunjukkan kinerja yang mandiri, berkualitas, dan terukur dalam menjaga kolaborasi profesional dengan pembimbing dan rekan kerja di tingkat nasional maupun internasional, serta menyelesaikan tugas secara bertanggung jawab dengan menggunakan perangkat geofisika modern yang relevan |
| | **SLO-12:** | Mampu menemukan sumber Daya alam baru melalui proses eksplorasi, analisis, interpretasi data dan informasi berdasarkan prinsip-prinsip geofisika eksplorasi yang ramah lingkungan |
| | **SLO-14:** | Mampu menyelidiki potensial sumberdaya alam dan memanfaatkan instrumen yang berbasis teknologi informasi dan komputasi yang sesuai untuk melakukan aktivitas eksplorasi SDA dan Mitigasi Bencana Alam |
| | **SLO ⇒ Course Learning Outcomes** | |
| | After completing this course, it is expected: | |
| | **SLO-8** | **CLO-1:** Students are able to carry out data acquisition using geophysical methods, data processing and data interpretation |
| | **SLO-9** | **CLO-1:** Students are able to carry out data acquisition using geophysical methods, data processing and data interpretation |
| | **SLO-12** | **CLO-2:** Able to apply geophysical methods for various purposes |
| | **SLO-14** | **CLO-2:** Able to apply geophysical methods for various purposes |
| | **CLO ⇒ Sub-CLO** | |
| | **CLO-1** | **Sub-CLO-1:**Skilled in conducting good field observations |
| | | **Sub-CLO-2:**Analyze the working principles of each geophysical equipment |
| | **CLO-2** | **Sub-CLO-3:**Skilled in processing geophysical data and interpreting measurement results logically and systematically |

**Correlation between SLOs/CLOs to Sub-CLOs**

| SLOs that are charged on the Course | CPMK | SUB CPMK | Form of Assessment* | | Weight | Value | Student Score |
|---|---|---|---|---|---|---|---|
| | | | Formative | Sumative | | | |
| | | | | Project/Case Study | | | |
| SLO-9 | CLO-1 | SUB-CLO-1 | Participation and Participation | 40 | 40 | | |
| SLO-9 | CLO-1 | SUB-CLO-2 | Participation and Participation | 40 | 40 | | |
| SLO-14 | CLO-2 | SUB-CLO-3 | Participation | 20 | 20 | | |
| | | | | 100 | 100 | | |

| | |
|---|---|
| **Course Description** | Gagal diterjemahkan |
| **Learning Materials/Subjects** | Gagal diterjemahkan |
| **Reference** | **Main References** |
| | Telford, W.M. (1990). Applied Geophysics Second Edition. Cambridge: Cambridge University Press. |
| | **Additional References** |
| | - |
| **Teaching Team** | Prof. Dr. Ir. Muh. Altin Massinai, MT., Surv., Ir. Bambang Hari Mei Soeprapto, M.Si., Dr. Muhammad Hamzah S., S.Si.,MT., Drs. Erfan, M.Si., Syamsuddin, S.Si.,MT., Sabrianto Aswad, S.Si., MT, Muhammad Fawzy Ismullah Massinai, S.Si, M.T, Aswar Syafnur, S.Si., M.Eng, Dr. Muhammad Taufiq Rafi, Saaduddin. S.Pd., M.Sc, Andi Muhammad Pramatadie, S.T., M.Eng., Ph.D, Andika, S.Si., M.Si. |
| **Course requirement** | |

| Week | Sub CPMK (End-of-stage learning ability) | Penilaian (*Assesment*) | | Learning Forms and Methods [time estimate] | | Content | Weight of Assessment (%) |
|---|---|---|---|---|---|---|---|
| | | Indicator | Techniques & Criteria | Offline | Online | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1-4 | Skilled in conducting good field observations (CPMK-1) | **Formative:**<br>Accuracy in analyzing and explaining and making conclusion<br>**Sumative:**<br>- | **Formative Criteria:**<br>Participation<br>**Sumative Criteria:**<br>Project/Case Study (20)<br>**Assessment Technique:**<br>Non Test | **Practicum, Studio Practice, Workshop Practice, Field Practice:**<br>Project-Based Learning (Project-based Learning)<br>TM[1 x 2 x 50"] | | - Application of geophysical methods<br>- Data Processing and preparation of reports | 20 |
| 5-6 | Skilled in conducting good field observations (CPMK-1) | **Formative:**<br>Accuracy in analyzing and explaining and making conclusion<br>**Sumative:**<br>- | **Formative Criteria:**<br>Participation<br>**Sumative Criteria:**<br>Project/Case Study (20)<br>**Assessment Technique:**<br>Non Test | **Studying:**<br>Project-Based Learning (Project-based Learning)<br>TM[1 x 2 x 50"] | | - Geoelectric, Geomagnetic and seismic methods<br>- Mapping method<br>- Tide method, ocean waves, ocean currents, and sedimentology | 20 |
| 7-8 | Analyze the working principles of each geophysical equipment (CPMK-1) | **Formative:**<br>Accuracy in analyzing and explaining and making conclusion<br>**Sumative:**<br>- | **Formative Criteria:**<br>Participation<br>**Sumative Criteria:**<br>Project/Case Study (20)<br>**Assessment Technique:**<br>Non Test | **Studying:**<br>Project-Based Learning (Project-based Learning)<br>TM[1 x 2 x 50"] | | Data Processing and report preparation | 20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9-12 | Analyze the working principles of each geophysical equipment (CPMK-1) | **Formative:**<br>Accuracy in analyzing and explaining and making conclusion<br>**Sumative:**<br>- | **Formative Criteria:**<br>Participation<br>**Sumative Criteria:**<br>Project/Case Study (20)<br>**Assessment Technique:**<br>Non Test | **Studying:**<br>Case Study (Case Study)<br>TM[1 x 2 x 50"] | | - Geoelectric, Geomagnetic and seismic methods<br>- Mapping methods<br>- Methods of tides, ocean waves, ocean currents, and sedimentology<br>- Weather and Climate Methods | 20 |
| 13-16 | Skilled in processing geophysical data and interpreting measurement results logically and systematically (CPMK-2) | **Formative:**<br>Accuracy in analyzing and explaining and making conclusion<br>**Sumative:**<br>- | **Formative Criteria:**<br>Participation<br>**Sumative Criteria:**<br>Project/Case Study (20)<br>**Assessment Technique:**<br>Non Test | **Studying:**<br>Case Study (Case Study)<br>TM[1 x 2 x 50"] | | Data Processing and report preparation | 20 |
| | | | | | | | 100 |

**Matrix of SLO, CLO, and Assessment Method**

| SLO / CLO | CLO-1 | CLO-2 |
|---|---|---|
| CPL-8 (KU1) | Project/Case Study (Weight 40%)<br>Project/Case Study (Weight 40%) | |
| CPL-9 (KU2) | Project/Case Study (Weight 40%)<br>Project/Case Study (Weight 40%) | |
| CPL-12 (KK2) | | Project/Case Study (Weight 20%) |
| CPL-14 (KK4) | | Project/Case Study (Weight 20%) |

**Evaluation Type and Assessment Weight**

| Type | Assessment Weight |
|---|---|
| Project/Case Study | 100 |
| Total | 100 |

**Assessment and Evaluation of Student Achievement of CLOs**

| SLOs that are charged on the Course | CLO | SUB CLO | Form of Assessment* | | Weight | Value | Student Score |
|---|---|---|---|---|---|---|---|
| | | | Formative | Sumative | | | |
| | | | | Project/Case Study | | | |
| SLO-9 | CLO-1 | SUB-CLO-1 | Participation and Participation | 40 | 40 | | |
| SLO-9 | CLO-1 | SUB-CLO-2 | Participation and Participation | 40 | 40 | | |
| SLO-14 | CLO-2 | SUB-CLO-3 | Participation | 20 | 20 | | |
| | | | | 100 | 100 | | |