

# **SEMESTER COURSE PLAN**

**MARITIME SOCIAL AND CULTURAL INSIGHTS AND SCIENCE AND TEXT COURSES  
(23U01111002)**



## **TEACHING TEAM**

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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**

**Mission**

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-11 (KK1) - Able to apply the principles of mathematics and earth science, as well as the principles of Exploration and Mitigation to solve natural resource exploration and disaster mitigation problems (Exploration natural resources and natural disaster mitigation)

**Course Learning Outcomes (CLO)**

- CPMK-1: Students are able to internalize humanistic and environmentally wise cultural and scientific values based on BMI. (CPL8, CPL9 dan CPL11)
- CPMK-2: Students are able to describe the values of maritime culture and science and technology based on BMI as independent and characterful individuals and have a spirit of social sensitivity. (CPL8, CPL9 dan CPL11)
- CPMK-3: Students are able to think critically, systematically and innovatively and communicate effectively regarding cultural and IPTEKS insights based on BMI which are humanistic and environmentally wise. (CPL8, CPL9 dan CPL11)

**Sub-CLO**

- Sub CPMK-1: Able to demonstrate the Indonesian Maritime Continent (BMI), Geography and the Potential of Natural Resources of the Maritime Continent of Indonesia (CPMK-2)

Sub CPMK-2: Able to describe Maritime Society, Institutions and History (CPMK-2)

Sub CPMK-3: Able to internalize Maritime Culture and Cultural Values (CPMK-1)

Sub CPMK-4: Able to describe the concepts of knowledge, science and technology and their development (CPMK-2)

Sub CPMK-5: Able to explain the concept of art and beauty, in relation to the substance of science and technology. (CPMK-2)

Sub CPMK-6: Able to describe the Integrity and Ethics of Science and Technology, the influence of the development of Science and Technology on resource management in maintaining the sustainability of the BMI environment (CPMK-1)

# Learning Analytics

Maritime Socio-Cultural Insights and Science and Technology



Able to describe the Integrity and Ethics of Science and Technology, the influence of the development of Science and Technology on resource management in maintaining the sustainability of the BMI environment (CPMK-1)



Able to explain the concept of art and beauty, in relation to the substance of science and technology. (CPMK-2)



Able to describe the concepts of knowledge, science and technology and their development (CPMK-2)



Able to internalize Maritime Culture and Cultural Values (CPMK-1)



Able to describe Maritime Society, Institutions and History (CPMK-2)



Able to demonstrate the Indonesian Maritime Continent (BMI), Geography and the Potential of Natural Resources of the Maritime Continent of Indonesia (CPMK-2)

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# HASANUDDIN UNIVERSITY

## FAKULTY OF MATHEMATICS AND NATURAL SCIENCES

### STUDY PROGRAM OF GEOPHYSICS - S1

### SEMESTER LEARNING PLAN

| Course                                                      |                                               | Code                                                                                                                                                                                                                                                                                                                                                                                                        | Course Group                             | Credits | SEMESTER                 | Compilation Date |
|-------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|---------|--------------------------|------------------|
| Maritime Socio-Cultural Insights and Science and Technology |                                               | 23U01111002                                                                                                                                                                                                                                                                                                                                                                                                 |                                          | 2       | 2                        | 1 Juli 2025      |
| AUTHORITY                                                   |                                               | SLP Developer Lecturer                                                                                                                                                                                                                                                                                                                                                                                      | Coordinator                              |         | Head of Study Program    |                  |
|                                                             |                                               | Prof. Dr. Munsir Lampe, MA., Prof. Dr. Ir. Musrizal Muin, M.Sc., Prof. Dr. Ir. Indrabayu, S.T., M.T., M.Bus.Sys., IPM., ASEAN.Eng., Rahmatullah, SIP., M.Si., Dr. rer.nat. Ir. Zainal, STP., M.Food.Tech., Dr. Nur Umriani Permatasari, S.Si.,M.Si., Dr. Ahmad Ismail, S.Sos., M.Si.                                                                                                                        | Dr. Nur Umriani Permatasari, S.Si.,M.Si. |         | Rahmatullah, SIP., M.Si. |                  |
| Learning                                                    | 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-11:                                       | Mampu menerapkan prinsip-prinsip matematika dan sains kebumian, serta prinsip Eksplorasi dan Mitigasi untuk menyelesaikan masalah eksplorasi SDA dan mitigasi bencana (Exploration natural resource and natural disaster mitigation)                                                                                                                                                                        |                                          |         |                          |                  |
|                                                             | SLO ⇒ Course Learning Outcomes                |                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |         |                          |                  |
|                                                             | After completing this course, it is expected: |                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |         |                          |                  |
|                                                             | SLO-8                                         | CLO-1: Students are able to internalize humanistic and environmentally wise cultural and scientific values based on BMI.                                                                                                                                                                                                                                                                                    |                                          |         |                          |                  |
|                                                             |                                               | CLO-2: Students are able to describe the values of maritime culture and science and technology based on BMI as independent and characterful individuals and have a spirit of social sensitivity.                                                                                                                                                                                                            |                                          |         |                          |                  |
|                                                             |                                               | CLO-3: Students are able to think critically, systematically and innovatively and communicate effectively regarding cultural and IPTEKS insights based on BMI which are humanistic and environmentally wise.                                                                                                                                                                                                |                                          |         |                          |                  |
|                                                             | SLO-9                                         | CLO-1: Students are able to internalize humanistic and environmentally wise cultural and scientific values based on BMI.                                                                                                                                                                                                                                                                                    |                                          |         |                          |                  |
|                                                             |                                               | CLO-2: Students are able to describe the values of maritime culture and science and technology based on BMI as independent and characterful individuals and have a spirit of social sensitivity.                                                                                                                                                                                                            |                                          |         |                          |                  |
|                                                             |                                               |                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |         |                          |                  |

|                                           |       |               |                                                                                                                                                                                                                           |                                |                                |                                |        |       |               |
|-------------------------------------------|-------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------|-------|---------------|
| Outcomes Course                           |       |               | CLO-3: Students are able to think critically, systematically and innovatively and communicate effectively regarding cultural and IPTEKS insights based on BMI which are humanistic and environmentally wise.              |                                |                                |                                |        |       |               |
|                                           |       | SLO-11        | CLO-1: Students are able to internalize humanistic and environmentally wise cultural and scientific values based on BMI.                                                                                                  |                                |                                |                                |        |       |               |
|                                           |       |               | CLO-2: Students are able to describe the values of maritime culture and science and technology based on BMI as independent and characterful individuals and have a spirit of social sensitivity.                          |                                |                                |                                |        |       |               |
|                                           |       |               | CLO-3: Students are able to think critically, systematically and innovatively and communicate effectively regarding cultural and IPTEKS insights based on BMI which are humanistic and environmentally wise.              |                                |                                |                                |        |       |               |
|                                           |       | CLO ⇒ Sub-CLO |                                                                                                                                                                                                                           |                                |                                |                                |        |       |               |
|                                           |       | CLO-2         | Sub-CLO-1:Able to demonstrate the Indonesian Maritime Continent (BMI), Geography and the Potential of Natural Resources of the Maritime Continent of Indonesia                                                            |                                |                                |                                |        |       |               |
|                                           |       |               | Sub-CLO-2:Able to describe Maritime Society, Institutions and History                                                                                                                                                     |                                |                                |                                |        |       |               |
|                                           |       |               | Sub-CLO-4:Able to describe the concepts of knowledge, science and technology and their development                                                                                                                        |                                |                                |                                |        |       |               |
|                                           |       |               | Sub-CLO-5:Able to explain the concept of art and beauty, in relation to the substance of science and technology.                                                                                                          |                                |                                |                                |        |       |               |
|                                           |       | CLO-1         | Sub-CLO-3:Able to internalize Maritime Culture and Cultural Values                                                                                                                                                        |                                |                                |                                |        |       |               |
|                                           |       |               | Sub-CLO-6:Able to describe the Integrity and Ethics of Science and Technology, the influence of the development of Science and Technology on resource management in maintaining the sustainability of the BMI environment |                                |                                |                                |        |       |               |
| 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                       |                                |                                |        |       |               |
|                                           |       |               |                                                                                                                                                                                                                           | <div>Gagal diterjemahkan</div> | <div>Gagal diterjemahkan</div> | <div>Gagal diterjemahkan</div> |        |       |               |
| SLO-11                                    | CLO-2 | SUB-CLO-1     | Accuracy of Ideas and Clarity of Description (SIKOLA 2.0 Forum)                                                                                                                                                           | 11                             | 0                              | 0                              | 11     |       |               |
| SLO-11                                    | CLO-2 | SUB-CLO-2     | Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)                                                                                                                                         | 0                              | 18                             | 0                              | 18     |       |               |
| SLO-11                                    | CLO-1 | SUB-CLO-3     | Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums)                                                                                                             | 0                              | 0                              | 21                             | 21     |       |               |
| SLO-11                                    | CLO-2 | SUB-CLO-4     | Accuracy of Ideas and Clarity of Description (Interactive SIKOLA 2.0 Class & Forum)                                                                                                                                       | 0                              | 20                             | 0                              | 20     |       |               |

| SLOs that are charged on the Course | CPMK  | SUB CPMK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Form of Assessment*                                                                                           |                                                    |                                                    |                                                    | Weight | Value | Student Score |
|-------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|--------|-------|---------------|
|                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Formative                                                                                                     | Sumative                                           |                                                    |                                                    |        |       |               |
|                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                               | <span style="color:red">Gagal diterjemahkan</span> | <span style="color:red">Gagal diterjemahkan</span> | <span style="color:red">Gagal diterjemahkan</span> |        |       |               |
| SLO-11                              | CLO-2 | SUB-CLO-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)                             | 9                                                  | 0                                                  | 0                                                  | 9      |       |               |
| SLO-11                              | CLO-1 | SUB-CLO-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums) | 0                                                  | 0                                                  | 21                                                 | 21     |       |               |
|                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                               | 20                                                 | 38                                                 | 42                                                 | 100    |       |               |
| Course Description                  |       | The Cultural Insights and Science and Technology subject of the Indonesian Maritime Continent (BMI) is included in the Unhas Compulsory Courses (MKWU) group and is a characteristic of Unhas. This course contains discussions about BMI's cultural and societal insight with all its main aspects, BMI's science and technology insight with all its main aspects, and the concept of BMI with its characteristics as a basis for implementing the Unhas Maritime Vision and Mission. In essence, this course aims to identify and discuss BMI-based cultural and science and technology values that are humanistic and environmentally sound as a source for the formation of independent and characterful human beings.                                                                                                                                                                                                                                             |                                                                                                               |                                                    |                                                    |                                                    |        |       |               |
| Learning Materials/Subjects         |       | 1. Vision and Conception of the Indonesian Maritime Continent (BMI).<br>2. Geography and Potential of Marine Natural Resources of the Indonesian Maritime Continent.<br>3. History, Maritime Society and Institutions<br>4. Culture and Maritime Cultural Values<br>5. Concepts of Knowledge, Science and technology and the relationship between science and technology<br>6. Technological developments and the impact of their development<br>7. Concepts of Art and Beauty, their relationship to the substance of Science and Technology.<br>8. Integrity and Ethics science and technology, the influence of science and technology developments on resource management in maintain environmental sustainability BMI.                                                                                                                                                                                                                                             |                                                                                                               |                                                    |                                                    |                                                    |        |       |               |
|                                     |       | Main References                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                               |                                                    |                                                    |                                                    |        |       |               |
|                                     |       | 1. Lampe, M. 2022. Maritime Textbook: Indonesian Maritime Social and Cultural Insights. ISBN. 9789795304487. Publisher Unhas Press.<br>2. National Defense and Security Council-BPP Technology. 1996. BMI (Indonesian Maritime Continent). Jakarta: Directorate of Natural Resources Inventory Technology.<br>3. Benardie, Hakim SP. 2003. Indonesian Maritime History. Marine Policy Study Project, Secretary General of the Indonesian Department of Maritime Affairs and Fisheries.<br>4. Kasim, S. 2017. Science and Technology Insight Philosophy (Unhas Textbook). ISBN: 978-602-6332-12-7. Pustaka Pena Press.Makassar.<br>5. Unhas Science and Technology Insights Lecturer Team, 2013, Science and Technology Insights Textbook UPT MKU UNHAS, 6th Edition. Unhas, Makassar.<br>6. Usman, H., et al. 2014. Science and Technology Insight Textbook (Using a Learning Approach). UPT MKU UNHAS. ISBN:978-602-99757-8-9. CV Offset Printing. Surprise. Makassar. |                                                                                                               |                                                    |                                                    |                                                    |        |       |               |
|                                     |       | Additional References                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                               |                                                    |                                                    |                                                    |        |       |               |

| <b>Reference</b>          |                                             | <ol style="list-style-type: none"> <li>DKP. 2007. United Nations Convention On The Law of The Sea (UNCLOS, DMI, Jakarta.</li> <li>Gani, Radi A. Et al. (Drawing Team). 1999. Policy Framework for the Development of Basic Scientific Patterns. Hasanuddin University Makassar.</li> <li>Joko, Pramono. 2005. Maritime Culture. Publisher PT Gramedia Pustaka Utama Jakarta.</li> <li>Lampe, Munsu. 2021. Shipping and Reproduction of Insights into Maritime Geo-Social-Cultural Unity of the Archipelago/Indonesia: A Focus on Maritime Anthropology Studies. Presented at the Acceptance Ceremony for the Position of Professor in the Field of Maritime Anthropology at the Faculty of Social and Political Sciences, Hasanuddin University in front of the Extraordinary Open Senate Meeting of Hasanuddin University, Tuesday, 30 November 2021 in Makassar.</li> <li>Hamid, Abd. 2020. Indonesian Maritime History and Culture. Yogyakarta: Ombak</li> <li>Paeni, Mukhlis. 1995. Efforts to Understand Maritime Culture. Paper contributed to the General Basic Course B Workshop, Faculty of Letters, Unhas.</li> <li>Simangunsong, Arifin. 2015. Indonesia's Future Sea. Jakarta: Gramedia Publishers.</li> <li>Unhas Identity Development Team 2009. UPT MKU Unhas Science and Technology Insights Workshop Material (Combination of Science and Technology Learning Materials), Makassar.</li> <li>Kartono, H. 2003. Environmental Pollution. Director General of Higher Education, Ministry of National Education, Jakarta.</li> <li>Kosela, S. 2003. Science and Technology for Human Life., Ministry of National Education, Jakarta.</li> <li>Mappadantji Amien, 2009. Science and Technology Insights (Philosophy and Conceptual Framework), Material Workshop for the Waste Technology UPT MKU Unhas course, Makassar.</li> <li>Masnur Muchlis, 2011. Character Education, Responding to the Challenges of the Multidimensional Crisis, PT Bumi Aksara, 2nd edition. 1090-1113; doi;10.3390/su3081090</li> <li>Suriasumantri, Jujun. 2003. Philosophy of Science A Popular Introduction</li> </ol> |                       |                                               |        |         |                          |
|---------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------------------------------|--------|---------|--------------------------|
| <b>Teaching Team</b>      |                                             | Prof. Dr. Munsu Lampe, MA., Rahmatullah, SIP., M.Si., Dr. rer.nat. Ir. Zainal, STP., M.Food.Tech., Dr. Nur Umriani Permatasari, S.Si., M.Si., Dr. Ahmad Ismail, S.Sos., M.Si.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |                                               |        |         |                          |
| <b>Course requirement</b> |                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                                               |        |         |                          |
| Week                      | Sub CPMK<br>(End-of-stage learning ability) | Penilaian (Assesment)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       | Learning Forms and Methods<br>[time estimate] |        | Content | Weight of Assessment (%) |
|                           |                                             | Indicator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Techniques & Criteria | Offline                                       | Online |         |                          |
| 1                         | 2                                           | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4                     | 5                                             | 6      | 7       | 8                        |



|     |                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                           |    |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 1-2 | Able to demonstrate the Indonesian Maritime Continent (BMI), Geography and the Potential of Natural Resources of the Maritime Continent of Indonesia (CPMK-2) | <p><b>Formative:</b></p> <ul style="list-style-type: none"> <li>• <b>Capabilities in demonstrating :</b> <ol style="list-style-type: none"> <li>1. Unhas Vision and Mission based on the Unhas Maritime Continent (BMI)</li> <li>2. BMI Conception</li> <li>3. Geography of the Republic of Indonesia, Marine Natural Resources</li> </ol> </li> </ul> <p><b>Sumative:</b></p> <p><b>Capabilities outline</b><br/>Ability to answer SubCPMK 1 questions (Geography and Potential of BMI Marine Natural Resources)</p> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Description (SIKOLA 2.0 Forum)</p> <p><b>Sumative Criteria:</b></p> <p>Collaborative Learning (CoL) (11)</p> <p><b>Assessment Technique:</b></p> <p>Test and Non-Test</p> | <p><b>Studying:</b></p> <p>Collaborative learning (Collaborative Learning)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Learning Method (MP) = Collaborative Learning</p> <p>Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 1</p> <p>1x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Collaborative learning (Collaborative Learning)</p> <p>Independent Activities (KM)= (1x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>· Reading Literature</li> <li>· Watching Videos</li> <li>· Accessing the SIKOLA 2.0 Menu Sub CPMK 1</li> </ul> <p>Structured Assignment Activities (KPT) = (1x2x60 Minutes)</p> <p>Students Create Individual Assignments</p> <p><b>ASSIGNMENT INSTRUCTIONS :</b></p> <ol style="list-style-type: none"> <li>1. Sub Material</li> <li>2. Technical Instructions</li> </ol> <p>Can be accessed in the SIKOLA 2.0 Sub CPMK 1 Task Menu</p> <p>2x2x60</p> | <ol style="list-style-type: none"> <li>1. Learning Contract</li> <li>2. BMI Vision and Conception</li> </ol> <p><b>Geography &amp; Potential of Marine Natural Resources</b></p> <p><b>REFERENCES :</b></p> <p>Main Books:<br/>1 (part III, IV), 2 (part I: 1-13)</p> <p>Supporting Books:<br/>1, 8 (Chapter 1: 1-70)</p> <p>MODULE 2</p> | 11 |
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| 3-4 | Able to describe Maritime Society, Institutions and History (CPMK-2) | <p><b>Formative:</b></p> <p>Ability to parse :</p> <ol style="list-style-type: none"> <li><b>Maritime History</b> (Nusantara Maritime Empire, Shipping and Law Maritime)</li> <li><b>Maritime Society</b> (Concept of Maritime Society, Maritime Social Groups and Their Social Characteristics, Ethnic Diversity, Communities coastal villages and islands, Migration patterns and activity characteristics maritime)</li> <li><b>Maritime Institutions</b></li> </ol> <p><b>Sumative:</b></p> <p>Ability to present "Case Sub CPMK 2"</p> <ol style="list-style-type: none"> <li>Maritime History</li> <li>Maritime Society and Institutions</li> </ol> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)</p> <p><b>Sumative Criteria:</b></p> <p>Case Study (CS) (18)</p> <p><b>Assessment Technique:</b></p> <p>Test and Non-Test</p> | <p><b>Studying:</b></p> <p>Case Study (Case Study)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Learning Method (MP) = Case Study</p> <p>Learning Scenario :</p> <p>Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 2</p> <p>2x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Case Study (Case Study)</p> <p>Independent Activities (KM)= (2x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>Reading Literature</li> <li>Watching Videos</li> <li>Accessing the SIKOLA 2.0 Sub CPMK 2 Menu</li> </ul> <p>Structured Assignment Activities (KPT) = (2x2x60 Minutes)</p> <p>Students Create Group Assignments</p> <p><b>TASK INSTRUCTIONS :</b></p> <ul style="list-style-type: none"> <li>Theme/Case</li> <li>Technical Instructions</li> </ul> <p>Can be accessed on the SIKOLA 2.0 Sub CPMK 2 Task Menu</p> <p>4x2x60</p> | <p><b>Indonesian Maritime History</b>BIBLIOGRAPHY :</p> <p>Main Book:<br/>1 (part V: 51-76), 3 (Chapter IX: 131-371)</p> <p>Supporting Books:<br/>5 (Chapter I), 6 MODULE 4</p> <p><b>Maritime Societies and Institutions</b></p> <p>Main Book:<br/>1 (section VI: 77-96, VII: 97-170; VIII: 171-196).</p> <p>Supporting Books:<br/>3 (Chapter I: 1-25) MODULE 5</p> <p><b>Demographics Maritime</b></p> <p>BIBLIOGRAPHY :</p> <p>Main Book:<br/>1 (part IV: 23-50),</p> <p>Supporting Books:<br/>3 (Chapter IV: 127-156), 4 MODULE 3</p> | 18 |
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| 5-8 | Able to internalize Maritime Culture and Cultural Values (CPMK-1) | <p><b>Formative:</b></p> <p>Ability to internalize:</p> <p><b>1. BMI maritime cultural values in aspects</b></p> <ol style="list-style-type: none"> <li>Cognitive/ mental,</li> <li>Language,</li> <li>Social grouping/organization,</li> <li>Economy,</li> <li>Technology,</li> <li>Arts, and</li> <li>Religion/ Belief</li> </ol> <p><b>2. The function of maritime cultural values as a source of forming independent and characterful people.</b></p> <p><b>Sumative:</b></p> <p>Ability to make presentations on "Project Sub CPMK 3" (Seven Cultural Elements)</p> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums)</p> <p><b>Sumative Criteria:</b></p> <p>Pjbl (Project Base Learning) (21)</p> <p><b>Assessment Technique:</b></p> <p>Non Test</p> | <p><b>Response and Tutorial:</b></p> <p>Project-Based Learning (Project-based Learning)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Learning Scenarios: Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 3</p> <p>4x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Case Study (Case Study)</p> <p>Independent Activities (KM)= (4x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>Reading Literature</li> <li>Watching Videos</li> <li>Accessing the SIKOLA 2.0 Menu Sub CPMK 3</li> </ul> <p>Structured Assignment Activities (KPT) = (4x2x60 Minutes)</p> <p>Students Make Individual Tasks &amp; Group</p> <p><b>TASK INSTRUCTIONS :</b></p> <ol style="list-style-type: none"> <li>Sub Material</li> <li>Theme/Case</li> <li>Technical Instructions</li> </ol> <p>Can be accessed in the SIKOLA 2.0 Task Menu Sub CPMK 3</p> <p>8x2x60</p> | <p><b>Culture and Maritime Cultural Values</b></p> <p><b>BIBLIOGRAPHY :</b></p> <p>Main Book:</p> <p>1 (part text-align: var(--bs-body-text-align);"&gt;<b>Maritime Economics</b></p> <p><b>BIBLIOGRAPHY :</b></p> <p>Main Book:</p> <p>1 (part IV: 23-50),</p> <p>Supporting Books:</p> <p>3 (Chapter IV: 127-156), 4 MODULE 3</p> | 21 |
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| 9-11 | Able to describe the concepts of knowledge, science and technology and their development (CPMK-2) | <p><b>Formative:</b></p> <p>Ability to describe:</p> <ol style="list-style-type: none"> <li>1. Concepts of Knowledge, Science and Technology</li> <li>2. Relationship between Science and Technology</li> <li>3. Technological Development</li> <li>4. Impact of Technological Development</li> </ol> <p><b>Sumative:</b></p> <p>Ability to answer SubCPMK 4 questions (Concepts of Knowledge, Science and Technology and Relationship between Science and Technology)</p> <p>Ability to present "Case Sub CPMK 4" (Technological developments and the impact of their development)</p> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Description (Interactive SIKOLA 2.0 Class &amp; Forum)</p> <p><b>Sumative Criteria:</b></p> <p>Case Study (CS) (20)</p> <p><b>Assessment Technique:</b></p> <p>Test and Non-Test</p> | <p><b>Studying:</b></p> <p>Case Study (Case Study)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Case Study</p> <p>Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 4</p> <p>3x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Case Study (Case Study)</p> <p>Independent Activities (KM)=(3x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>· Reading Literature</li> <li>· Watching Videos</li> <li>· Accessing the SIKOLA 2.0 Sub CPMK 4 Menu</li> </ul> <p>Structured Assignment Activities (KPT) = (3x2x60 Minutes)</p> <p>Students Create Group Assignments</p> <p><b>TASK INSTRUCTIONS :</b></p> <ol style="list-style-type: none"> <li>1. Sub Material</li> <li>2. Theme/Case</li> <li>3. Technical Instructions</li> </ol> <p>Can be accessed in the SIKOLA 2.0 Sub CPMK 4 Task Menu</p> <p>3x2x60</p> | <p>The concept of knowledge, science and technology and the relationship between science and technology. Technological developments and the impact of their developments</p> <p><b>REFERENCES :</b><br/>Science and Technology Insights Book Chapters 2,3, 4, 5, 6, 7<br/>MODULE 7 &amp; 8</p> | 20 |
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| 12 | Able to explain the concept of art and beauty, in relation to the substance of science and technology. (CPMK-2) | <p><b>Formative:</b></p> <p>Ability to describe:</p> <ol style="list-style-type: none"> <li>1. Concepts of Art and Beauty</li> <li>2. Relationships with the substance of Science and Technology</li> </ol> <p><b>Sumative:</b></p> <p>Ability to answer SubCPMK 5 questions (Concepts of Art and Beauty and their relationship to the substance of Science and Technology)</p> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)</p> <p><b>Sumative Criteria:</b></p> <p>Collaborative Learning (CoL) (9)</p> <p><b>Assessment Technique:</b></p> <p>Test and Non-Test</p> | <p><b>Studying:</b></p> <p>Collaborative learning (Collaborative Learning)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Learning Method (MP) = Collaborative Learning</p> <p>Learning Scenario :</p> <p>Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 5</p> <p>1x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Collaborative learning (Collaborative Learning)</p> <p>Independent Activities (KM)=(1x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>· Reading Literature</li> <li>· Watching Videos</li> <li>· Accessing the SIKOLA 2.0 Sub CPMK 5 Menu</li> </ul> <p>Structured Assignment Activities (KPT) = (1x2x60 Minutes)</p> <p>Student Create Individual Assignment</p> <p><b>TASK INSTRUCTIONS :</b></p> <ol style="list-style-type: none"> <li>1. Sub Material</li> <li>2. Technical Instructions</li> </ol> <p>Can be accessed in the SIKOLA 2.0 Sub CPMK 5 Task Menu</p> <p>2x2x60</p> | <p>The concept of art and beauty, its relation to the substance of science and technology.</p> <p>REFERENCES:<br/>Science and Technology Insights Book Chapter 9<br/>MODULE 9</p> | 9 |
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| 13-16 | Able to describe the Integrity and Ethics of Science and Technology, the influence of the development of Science and Technology on resource management in maintaining the sustainability of the BMI environment (CPMK-1) | <p><b>Formative:</b></p> <p>Ability to Analyze :</p> <p>1, Integrity and Ethics of S&amp;T,</p> <p>2, the influence of developments in science and technology on resource management in maintaining environmental sustainability BMI</p> <p><b>Sumative:</b></p> <p>Ability to make presentations on “Project Sub CPMK 6”</p> | <p><b>Formative Criteria:</b></p> <p>Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums)</p> <p><b>Sumative Criteria:</b></p> <p>Pjbl (Project Base Learning) (21)</p> <p><b>Assessment Technique:</b></p> <p>Non Test</p> | <p><b>Studying:</b></p> <p>Project-Based Learning (Project-based Learning)</p> <p>Guided Learning Activities (KBT) = (1x2x50 Minutes)</p> <p>Learning Scenarios:<br/>Can be accessed in the SIKOLA 2.0 Document Menu Sub CPMK 6</p> <p>2x2x50</p> | <p><b>Response and Tutorial:</b></p> <p>Collaborative learning (Collaborative Learning)</p> <p>Independent Activities (KM)= (4x2x60 Minutes)</p> <ul style="list-style-type: none"> <li>· Reading Literature</li> <li>· Watching Videos</li> <li>· Accessing the SIKOLA 2.0 Menu Sub CPMK 6</li> </ul> <p>Structured Assignment Activities (KPT) = (4x2x60 Minutes)<br/>Students Make Individual Tasks &amp; Group</p> <p>TASK INSTRUCTIONS :</p> <ol style="list-style-type: none"> <li>1. Sub Material</li> <li>2. Theme/Case</li> <li>3. Technical Instructions</li> </ol> <p>Can be accessed in the SIKOLA 2.0 Task Menu Sub CPMK 6</p> <p>4x2x60</p> | <p>Integrity and Ethics of Science and Technology, the influence of developments in Science and Technology on resource management in preserving the BMI environment.</p> <p>REFERENCES:<br/>Science and Technology Insights Book Chapter 10<br/>MODULE 10</p> | 21 |     |
|       |                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                               |    | 100 |

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

| SLO / CLO    | CLO-1                                                      | CLO-2                                                                                                                   |
|--------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| CPL-8 (KU1)  | data not found (Weight 21%)<br>data not found (Weight 21%) | data not found (Weight 11%)<br>data not found (Weight 18%)<br>data not found (Weight 20%)<br>data not found (Weight 9%) |
| CPL-9 (KU2)  | data not found (Weight 21%)<br>data not found (Weight 21%) | data not found (Weight 11%)<br>data not found (Weight 18%)<br>data not found (Weight 20%)<br>data not found (Weight 9%) |
| CPL-11 (KK1) | data not found (Weight 21%)<br>data not found (Weight 21%) | data not found (Weight 11%)<br>data not found (Weight 18%)<br>data not found (Weight 20%)<br>data not found (Weight 9%) |

### Evaluation Type and Assessment Weight

| Type                         | Assessment Weight |
|------------------------------|-------------------|
| Collaborative Learning (CoL) | 20                |
| Case Study (CS)              | 38                |
| Pjbl (Project Base Learning) | 42                |
| 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                                           |                                                    |                                                    |        |       |               |
|                                     |       |           |                                                                                                               | <span style="color:red">Gagal diterjemahkan</span> | <span style="color:red">Gagal diterjemahkan</span> | <span style="color:red">Gagal diterjemahkan</span> |        |       |               |
| SLO-11                              | CLO-2 | SUB-CLO-1 | Accuracy of Ideas and Clarity of Description (SIKOLA 2.0 Forum)                                               | 11                                                 | 0                                                  | 0                                                  | 11     |       |               |
| SLO-11                              | CLO-2 | SUB-CLO-2 | Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)                             | 0                                                  | 18                                                 | 0                                                  | 18     |       |               |
| SLO-11                              | CLO-1 | SUB-CLO-3 | Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums) | 0                                                  | 0                                                  | 21                                                 | 21     |       |               |
| SLO-11                              | CLO-2 | SUB-CLO-4 | Accuracy of Ideas and Clarity of Description (Interactive SIKOLA 2.0 Class & Forum)                           | 0                                                  | 20                                                 | 0                                                  | 20     |       |               |
| SLO-11                              | CLO-2 | SUB-CLO-5 | Accuracy of Ideas and Clarity of Description (Interactive Class/SIKOLA 2.0 Forum)                             | 9                                                  | 0                                                  | 0                                                  | 9      |       |               |
| SLO-11                              | CLO-1 | SUB-CLO-6 | Accuracy of Ideas and Clarity of Descriptions (Individual Assignments, Interactive Classes/SIKOLA 2.0 Forums) | 0                                                  | 0                                                  | 21                                                 | 21     |       |               |
|                                     |       |           |                                                                                                               | 20                                                 | 38                                                 | 42                                                 | 100    |       |               |



