COURSE PORTFOLIO

Study Program : MATHEMATICS - S1

Semester : EVEN 2024/2025

Course Code : 23H01121303

Course Name : Mathematical Statistics

Coordinator : Dr. Firman, S.Si.,M.Si.

Lecturer Team Member : Dr. Firman, S.Si., M.Si., Jusmawati Massalesse, 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 | |
|------------------------------|-----------------------------------|------------|--|--|
| | Jusmawati Massalesse, S.Si.,M.Si. | 8 times | Number of students: 38 persons | |
| Mathematical Statistics A | Dr. Firman, S.Si.,M.Si. : | 8 times | Presence ≥ 80% : 36 persons (94.74 %) Presence < 80% : 2 persons (5.26 | |
| | Total Meeting : 16 times. | | %) | |
| | Jusmawati Massalesse, S.Si.,M.Si. | 8 times | Number of students: 35 persons | |
| Mathematical Statistics B | Dr. Firman, S.Si.,M.Si. : | 8 times | Presence ≥ 80% : 33 persons (94.29 %) Presence < 80% : 2 persons (5.71 | |
| | Total Meeting : 16 times. | | %) | |

Materials/practicum provided

- 1. Introduction to Statistical Inference
- 2. Sufficient Statistics
- 3. Point Estimation and Confidence Interval
- 4. Hypothesis Testing Theory (Hypothesis Testing Theory)

The learning methods implemented

Cooperative learning, Self-Directed Learning, Case Studies, Collaborative Learning

The assessment method implemented

- 1. Case Studies
- 2. Mid Test
- 3. Final Test
- 4. Independent Assignment

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) |
|------------------------------------|-------|---------------------------|---------|-------------------------------|
| ILO 1 | CLO-1 | Case Studies | 20.00 % | 62.88 |
| ILO 1 | CLO-1 | Final Test | 20.00 % | 87.25 |
| ILO 1 | CLO-1 | Mid Test | 10.00 % | 74.05 |
| ILO 1 | CLO-1 | Case Studies | 10.00 % | 80.55 |
| ILO 1 | CLO-1 | Independent Assignment | 5.00 % | 79.86 |
| ILO 1 | CLO-1 | Case Studies | 15.00 % | 80.82 |
| KU1 | CLO-2 | Case Studies | 15.00 % | 80.82 |
| KU1 | CLO-2 | Case Studies | 10.00 % | 80.55 |
| KU1 | CLO-2 | Case Studies | 20.00 % | 73.96 |
| KU1 | CLO-2 | Final Test | 20.00 % | 87.25 |
| KU1 | CLO-2 | Mid Test | 10.00 % | 74.05 |
| KU1 | CLO-3 | Final Test | 20.00 % | 87.25 |
| KU1 | CLO-3 | Case Studies | 20.00 % | 76.73 |
| KU2 | CLO-1 | Case Studies | 15.00 % | 80.82 |
| KU2 | CLO-1 | Case Studies | 10.00 % | 80.55 |
| KU2 | CLO-1 | Case Studies | 20.00 % | 62.88 |
| KU2 | CLO-1 | Final Test | 20.00 % | 87.25 |
| KU2 | CLO-1 | Mid Test | 10.00 % | 74.05 |
| KU2 | CLO-1 | Independent Assignment | 5.00 % | 79.86 |
| KU2 | CLO-3 | Final Test | 20.00 % | 87.25 |
| KU2 | CLO-3 | Case Studies | 20.00 % | 76.73 |
| KK3 | CLO-2 | Mid Test | 10.00 % | 74.05 |

| LOs that are charged to the Course | CLO | Assessment Form | Weight | Average student score (0-100) |
|------------------------------------|-------|-----------------|---------|-------------------------------|
| KK3 | CLO-2 | Case Studies | 20.00 % | 73.96 |
| KK3 | CLO-2 | Final Test | 20.00 % | 87.25 |
| KK3 | CLO-2 | Case Studies | 10.00 % | 80.55 |
| KK3 | CLO-2 | Case Studies | 15.00 % | 80.82 |

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 | 34.25% |
| CLO-2 | 56.16% |
| CLO-3 | 69.86% |

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

Course Grade

| Course Grade | Number and Percentage of Students |
|--------------|--|
| A | 15 (20.5%) |
| A- | 27 (37.0%) |
| B+ | 16 (21.9%) |
| В | 8 (11.0%) |
| B- | 2 (2.7%) |
| C+ | 0 (0.0%) |
| С | 1 (1.4%) |
| D | 0 (0.0%) |
| Е | 4 (5.5%) |
| • | |

3. Learning evaluation (survey) results

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

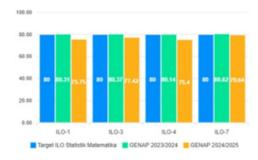
Hasil Evaluasi pembelajaran mata kuliah Statistik Matematika





Hasil Pengukuran CPL Mata Kuliah Statistik Matematika





4. Analysis and Reflection

Analysis

1. Mild but Consistent Decrease in Performance

Data analysis shows that there is a mild but consistent decline in performance in all measured Graduate Learning Outcomes (CPL). The performance of courses which in the EVEN 2023/2024 period managed to reach the target of 80, in the EVEN 2024/2025 period fell slightly to a score range of 75 to 79. Although not drastic, this decline was systemic because it affected all areas.

2. Stability of Performance at a "Good" Level and the Existence of Superior Areas

Despite the decline, performance in the last period was still relatively stable at a "good" level. No CPL fell to critical levels. In particular, ILO-7 showed the strongest performance with a score of 79.64, which is very close to the target of 80. This shows that the learning foundation in this area is still very strong.

Reflection

1. The Need for Proactive Intervention to Prevent Further Declines

This mild but even decline should be reflected as an early warning signal. Even though it is not yet a big problem, this is a crucial moment to make proactive interventions to prevent the downward trend from continuing in the future. Small corrective actions now will be more effective than having to carry out major overhauls if performance continues to decline.

2. Optimization Potential by Referring to the Strongest Areas

The ILO-7 performance which has almost reached the target can be reflected as an internal good practice that can be used as a reference. The follow-up strategy does not need to be a complete

overhaul, but rather focuses on optimization. By analyzing what keeps ILO-7 strong, such as its teaching methods or the types of evaluation questions, we can adapt those successful elements to provide the small boost that other CPLs need to once again surpass the target of 80.

5. Follow-up Plan

Based on the results of the CPL measurement for the Mathematical Statistics course which shows a decrease in achievement in the 2024/2025 Even semester compared to the target and the previous semester, the follow-up plan that needs to be carried out is to increase the intensity of learning by providing additional practice questions in stages and remedial guidance for students who have not achieved the target. In addition, it is necessary to apply active learning methods such as discussions and relevant case studies to strengthen understanding of statistical concepts. The use of statistical software must also be optimized so that students can become more familiar with the practical application of the material studied. Regular monitoring of achievements and immediate feedback will help adjust learning strategies quickly. With these steps, it is hoped that CPL achievements in the next semester can increase and meet the targets that have been set.

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

Following the findings of the previous semester's evaluation for the Mathematical Statistics Course, which identified a mild but consistent decline in performance across all CPLs, a follow-up plan focusing on proactive optimization has been implemented. The effectiveness of early intervention based on data, and recommendations for this optimization cycle to become standard practice to maintain the stability of superior performance in the future.

Makassar, 17 Oktober 2025

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