

COURSE PORTFOLIO

Study Program	: MATHEMATICS - S1
Semester	: EVEN 2024/2025
Course Code	: 23H01121903
Course Name	: Economic and Financial Mathematics
Coordinator	: Prof. Dr. Jeffry Kusuma
Lecturer Team Member	: Mauliddin, S.Si., M.Si, Prof. Dr. Jeffry Kusuma

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
	Prof. Dr. Jeffry Kusuma : 8 times	Number of students: 32 persons
Economic and Financial Mathematics	Mauliddin, S.Si., M.Si : 8 times	Presence \geq 80% : 26 persons (81.25 %) Presence < 80% : 6 persons (18.75 %)
	Total Meeting : 16 times.	

Materials/practicum provided

1. Probability Theory Sans", "Droid Sans", "Helvetica Neue", sans-serif;">2. Normal random variable (Normal random variable)
3. Brownian Motion and Geometric Brownian Motion (Brownian Motion and Geometry Brownian Motion)
4. Interest Rate and Present Value Analysis (interest rate and present value analysis)
5. Arbitration Theorem
6. Black-Scholes Formula (Black-Scholes Formula)

The learning methods implemented

Collaborative Learning

The assessment method implemented

1. Short Q&A
2. Case Studies
3. Mid Test
4. Final Test

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	Short Q&A	5.00 %	88.59
ILO 1	CLO-1	Case Studies	10.00 %	91.12
ILO 1	CLO-1	Mid Test	30.00 %	75.91
ILO 1	CLO-1	Final Test	25.00 %	56.41
P2	CLO-2	Case Studies	10.00 %	72.40
P2	CLO-2	Mid Test	30.00 %	75.91
P2	CLO-2	Final Test	25.00 %	56.41
P2	CLO-3	Case Studies	10.00 %	57.91
P2	CLO-3	Final Test	25.00 %	56.41
KU2	CLO-2	Case Studies	10.00 %	72.40
KU2	CLO-2	Mid Test	30.00 %	75.91
KU2	CLO-2	Final Test	25.00 %	56.41
KK1	CLO-3	Case Studies	10.00 %	57.91
KK1	CLO-3	Final Test	25.00 %	56.41
KK3	CLO-3	Case Studies	10.00 %	57.91
KK3	CLO-3	Final Test	25.00 %	56.41

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	50.00%
CLO-2	6.25%
CLO-3	3.12%

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

Course Grade

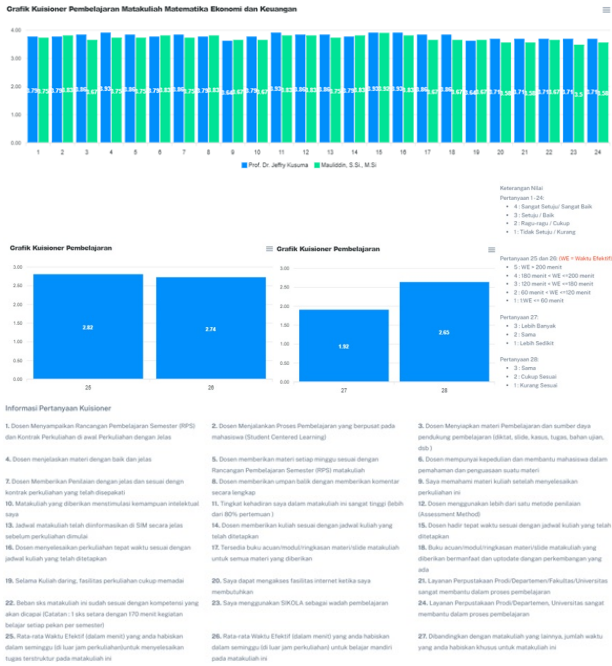
Course Grade	Number and Percentage of Students
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Course Grade	Number and Percentage of Students
A	1 (3.1%)
A-	4 (12.5%)
B+	16 (50.0%)
B	4 (12.5%)
B-	0 (0.0%)
C+	2 (6.2%)
C	1 (3.1%)
D	2 (6.2%)
E	2 (6.2%)

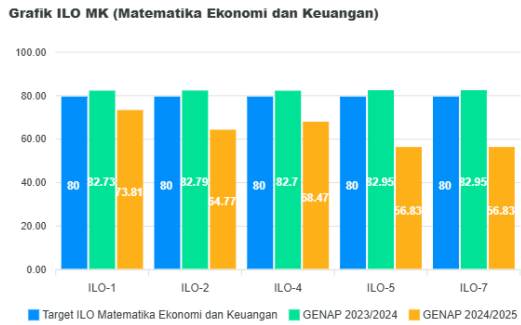
3. Learning evaluation (survey) results

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

Hasil Evaluasi pembelajaran Mata Kuliah Matematika Ekonomi dan Keuangan



Hasil Pengukuran CPL Mata Kuliah Matematika Ekonomi dan Keuangan



4. Analysis and Reflection

Analysis

1. Performance Collapse from Superior Level to Low Level

Data analysis shows a very drastic and systemic collapse in performance. Subjects which in the EVEN 2023/2024 period were at a superior performance level with all CPLs exceeding the target of 80 (average score 83), in the EVEN 2024/2025 period fell significantly, where all CPLs are now far below the target.

2. Degradation Rates Vary with the Presence of Critical Failure Areas

The degradation that occurs is not uniform across all CPLs. The most critical failure occurred at ILO-5 and ILO-7, where both experienced the most severe declines, falling by around 26 points from 83 to a very low level of 57. The other CPLs also experienced significant declines, although not as severe, with final scores in the 64 to 74 range.

Reflections

1. Indication of Fundamental Changes That Have a Negative Impact

The drastic fall in performance from a very high level reflects the high possibility that fundamental changes have occurred that have a negative impact on course implementation between 2023/2024 and 2024/2025. This reflection directs investigation into systemic factors, such as changes in lecturers, overhaul of the syllabus, or the implementation of a new final evaluation system that has proven to be ineffective.

2. The Need for Emergency Investigation with Priority to the Weakest Areas

This situation reflects an emergency condition that demands immediate and focused investigation. Given the varying levels of decline, investigative priorities should start from the most critical areas, namely analyzing in depth the learning and evaluation processes at ILO-5 and ILO-7. Understanding the root of the problem in these two weakest areas can provide the key to fixing problems that occur throughout the course.

5. Follow-up Plan

In response to the drastic decline in all CPL achievements in Mathematics, Economics and Finance, data analysis shows that the main cause is massive student failure in the Final Test, which is reflected in the uniformly very low average score (56.41), and is exacerbated by the low achievement in the final stage case study (CPMK-3). Therefore, the follow-up plan will prioritize the investigation and overhaul of the Final Semester Examination—including reviewing the alignment of question items with the material, level of difficulty, and time allocation—as well as strengthening the learning process in the second half of the semester by adding intensive practice sessions to prepare students for a comprehensive final evaluation. These steps aim to address the root of the problem in the final evaluation, so that CPL achievements can be returned to a level above the target in the following period.

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

Following up on the findings of previous evaluations in the Economics and Finance Mathematics Course, which showed a decline in overall performance, especially in ILO-5 and ILO-7 which fell to a critical level of 57, an emergency intervention plan has been implemented. This success proves the effectiveness of an improvement strategy that starts from a critical point to raise achievements comprehensively, but continuous improvement is needed

Makassar, 15 Oktober 2025

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