

COURSE PORTFOLIO

Study Program	: MATHEMATICS - S1
Semester	: EVEN 2024/2025
Course Code	: 23H01120903
Course Name	: Real Analysis
Coordinator	: Naimah Aris, S.Si.,M.Math.
Lecturer Team Member	: Naimah Aris, S.Si.,M.Math., Prof. Dr. Budi Nurwahyu, MS., Dr. Muh. Nur, 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
Real Analysis A	Jusmawati Massalesse, S.Si.,M.Si.	: 8 times	Number of students: 40 persons
	Naimah Aris, S.Si.,M.Math.	: 8 times	Presence $\geq 80\%$: 37 persons (92.50 %)
	Total Meeting : 16 times.		Presence $< 80\%$: 3 persons (7.50 %)
Real B Analysis	Prof. Dr. Budi Nurwahyu, MS.	: 8 times	Number of students: 32 persons
	Dr. Muh. Nur, S.Si., M.Si.	: 8 times	Presence $\geq 80\%$: 32 persons (100.00 %)
	Total Meeting : 16 times.		Presence $< 80\%$: 1 person (3.12 %)

Materials/practicum provided

Derivative, Riemann Integral, Sequence of function, Series of function, Metric space

The learning methods implemented

Collaborative Learning, case studies, small group discussions

The assessment method implemented

1. Quiz
2. Case Studies
3. Mid 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)
P2	CLO-1	Case Studies	20.00 %	60.61
P2	CLO-1	Mid Test	20.00 %	80.55
P2	CLO-1	Case Studies	15.00 %	78.62
P2	CLO-1	Case Studies	10.00 %	70.72
P2	CLO-1	Quiz	5.00 %	45.60
P2	CLO-3	Mid Test	20.00 %	80.55
P2	CLO-3	Case Studies	15.00 %	80.28
P2	CLO-3	Case Studies	10.00 %	76.80
KU2	CLO-1	Case Studies	20.00 %	60.61
KU2	CLO-1	Mid Test	20.00 %	80.55
KU2	CLO-1	Case Studies	15.00 %	78.62
KU2	CLO-1	Quiz	5.00 %	45.60
KU2	CLO-1	Case Studies	10.00 %	70.72
KU2	CLO-2	Case Studies	10.00 %	76.80
KU2	CLO-2	Mid Test	20.00 %	80.55
KU2	CLO-2	Case Studies	15.00 %	80.28
KK3	CLO-2	Case Studies	10.00 %	76.80
KK3	CLO-2	Case Studies	15.00 %	80.28
KK3	CLO-2	Mid Test	20.00 %	80.55
KK3	CLO-3	Case Studies	10.00 %	76.80
KK3	CLO-3	Case Studies	15.00 %	80.28
KK3	CLO-3	Mid Test	20.00 %	80.55

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	43.06%
CLO-2	47.22%
CLO-3	47.22%

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

students score ≥ 80 .

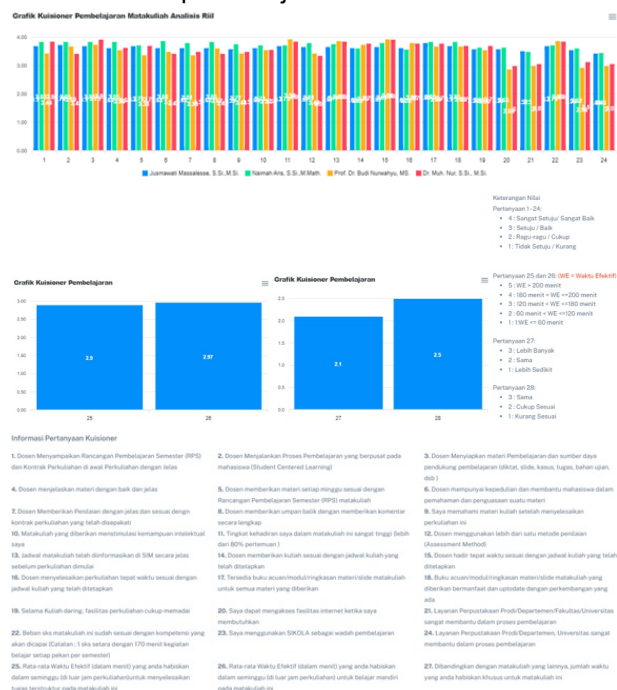
Course Grade

Course Grade	Number and Percentage of Students
A	15 (20.8%)
A-	19 (26.4%)
B+	15 (20.8%)
B	7 (9.7%)
B-	5 (6.9%)
C+	6 (8.3%)
C	0 (0.0%)
D	1 (1.4%)
E	4 (5.6%)

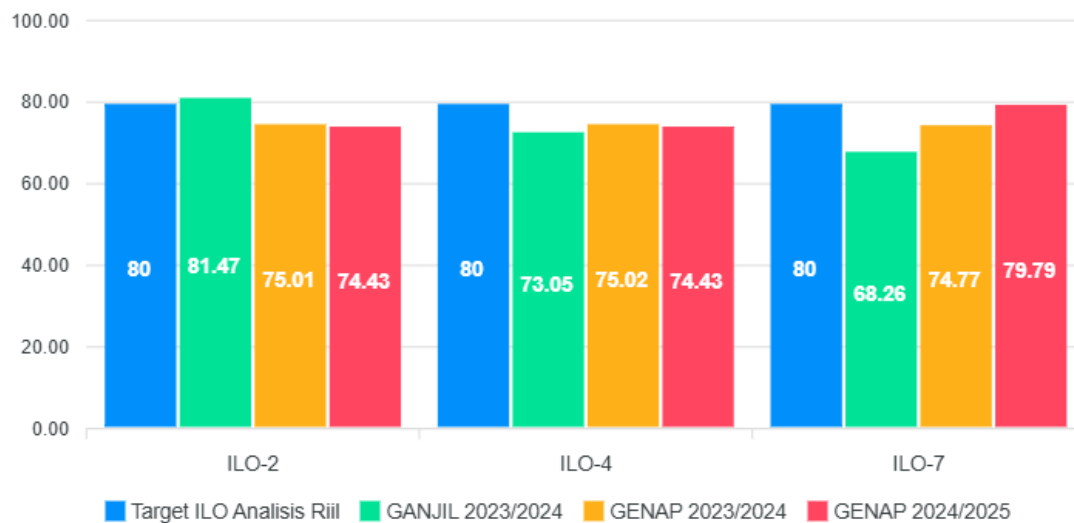
3. Learning evaluation (survey) results

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

Hasil Evaluasi pembelajaran mata kuliah Analisis Riil



Hasil Pengukuran CPL Mata Kuliah Analisis Riil



4. Analysis and Reflection

Analysis

1. Positive Trend Reversal to Significant Decline

Data analysis shows a very clear trend reversal. During the 2023/2024 academic year, this course shows an improvement trend, where achievements in the EVEN semester (orange) are higher than the ODD semester (green), especially in ILO-4 and ILO-7. However, this positive trend completely reversed in the EVEN 2024/2025 period (red), where all CPLs experienced a significant decline in performance and fell to their lowest level in the last two years (all below a score of 70).

2. Even Decline in All Achievement Areas

The decline in the last period occurred evenly in all achievement areas measured. ILO-2, previously the strongest area (score 75-79), plunged to 66.32. ILO-4, which had improved to reach a score of 75.82, also fell to 66.32. Meanwhile, ILO-7 also experienced a significant decline from 74.77 to 69.29, erasing all the progress achieved previously.

Reflection

1. Indication of Fundamental Negative Changes

The drastic reversal of the trend from improving to significantly decreasing reflects the possibility of fundamental changes that will have a negative impact between the 2023/2024 and 2024/2025 academic years. This reflection led to investigations into systemic factors, new evaluation methods that proved less effective than previous methods.

2. The Importance of Consistency and Continuity of Good Practice

Data from the 2023/2024 academic year proves that improvement in this difficult subject is very possible. Success in the 2023/2024 EVEN semester should be a model of "good practice" that needs to be documented. The reflection is that the main challenge is not only finding ways to improve performance, but also maintaining consistency and sustainability of strategies that have proven successful so that there is no regression or decline again in the future.

5. Follow-up Plan

As a follow-up, the main focus of improvement will be directed at strengthening core concepts related to ILO-2, ILO-4, and ILO-7. especially on difficult topics. Learning strategies will be optimized by integrating the Problem-Based Learning (PBL) method to improve students' ability to solve problems. In addition, additional graded practice questions (basic, intermediate, advanced) will be provided periodically to help students practice in a structured and independent manner. It is hoped that providing tutorials by appointed assistants will improve students' abilities in working on complex questions.

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

The improvement results from the previous reflection show good effectiveness as shown by the survey results obtained. However, from the results of measuring CPL achievement, improvements still need to be made in the next semester.

Makassar, 15 Oktober 2025

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