COURSE PORTFOLIO

Study Program	:	MATHEMATICS - S1
Semester	:	ODD 2023/2024
Course Code	:	23H01130703
Course Name	:	Mathematical Computation
Coordinator	:	Prof. Agustinus Ribal, S.Si.,M.Sc., Ph. D
Lecturer Team Member	:	Prof. Agustinus Ribal, S.Si.,M.Sc., Ph. D, Dr. Khaeruddin, M.Sc.

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
Mathematical Computation	Prof. Agustinus Ribal, S.Si.,M.Sc., Ph. D	:	8 times	Number of students: 31 persons
	Dr. Khaeruddin, M.Sc.	:	8 times	Presence ≥ 80% : 30 persons (96.77 %) Presence < 80% : 0 person (0.00 %)
	Total Meeting : 16 times.			

Materials/practicum provided

1. Numerical methods for initial-value problems
2. Systems of ordinary differential equations
3. Two-point boundary value problems
4. Vector and matrix norms, spectral radius, series of matrices and convergence
5. Iterative methods for large-scale linear systems of equations
6. Non-linear systems of equations

The learning methods implemented

Small Group Discussion,

The assessment method implemented

1. Case Studies
2. Mid Test
3. 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)
KU1	CLO-1	Case Studies	5.00 %	83.94
KU1	CLO-1	Final Test	20.00 %	83.05
KU1	CLO-1	Case Studies	5.00 %	83.05
KU1	CLO-1	Mid Test	20.00 %	83.07
KU1	CLO-1	Case Studies	10.00 %	82.54
KU2	CLO-1	Case Studies	5.00 %	83.94
KU2	CLO-1	Final Test	20.00 %	83.05
KU2	CLO-1	Mid Test	20.00 %	83.07
KU2	CLO-1	Case Studies	10.00 %	82.54
KU2	CLO-1	Case Studies	5.00 %	83.05
KU2	CLO-2	Case Studies	10.00 %	82.71
KU2	CLO-2	Mid Test	20.00 %	83.07
KU2	CLO-2	Case Studies	5.00 %	83.94
KU2	CLO-2	Final Test	20.00 %	83.05
KK2	CLO-3	Case Studies	10.00 %	82.71
KK2	CLO-3	Case Studies	8.00 %	82.91
KK2	CLO-3	Case Studies	7.00 %	83.92
KK2	CLO-3	Case Studies	10.00 %	83.06
KK2	CLO-3	Case Studies	5.00 %	82.97
KK2	CLO-3	Mid Test	20.00 %	83.07
KK2	CLO-3	Final Test	20.00 %	83.05
KK2	CLO-3	Case Studies	5.00 %	83.94

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	93.55%
CLO-2	93.55%

CLO	% of students who achieved a CLO score of at least 80
CLO-3	96.77%
CLO-4	0.00%

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.

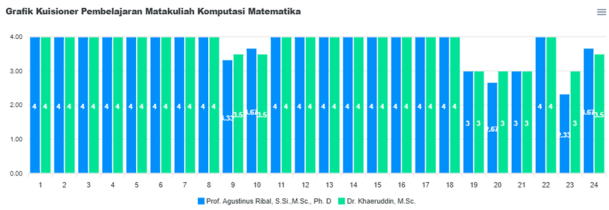
Course Grade

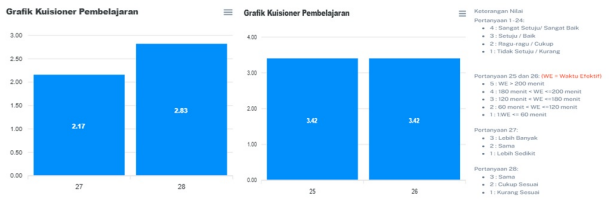
Course Grade	Number and Percentage of Students
A	3 (9.7%)
A-	28 (90.3%)
B+	0 (0.0%)
B	0 (0.0%)
B-	0 (0.0%)
C+	0 (0.0%)
C	0 (0.0%)
D	0 (0.0%)
E	0 (0.0%)

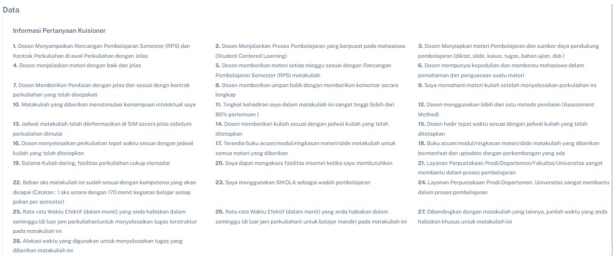
3. Learning evaluation (survey) results

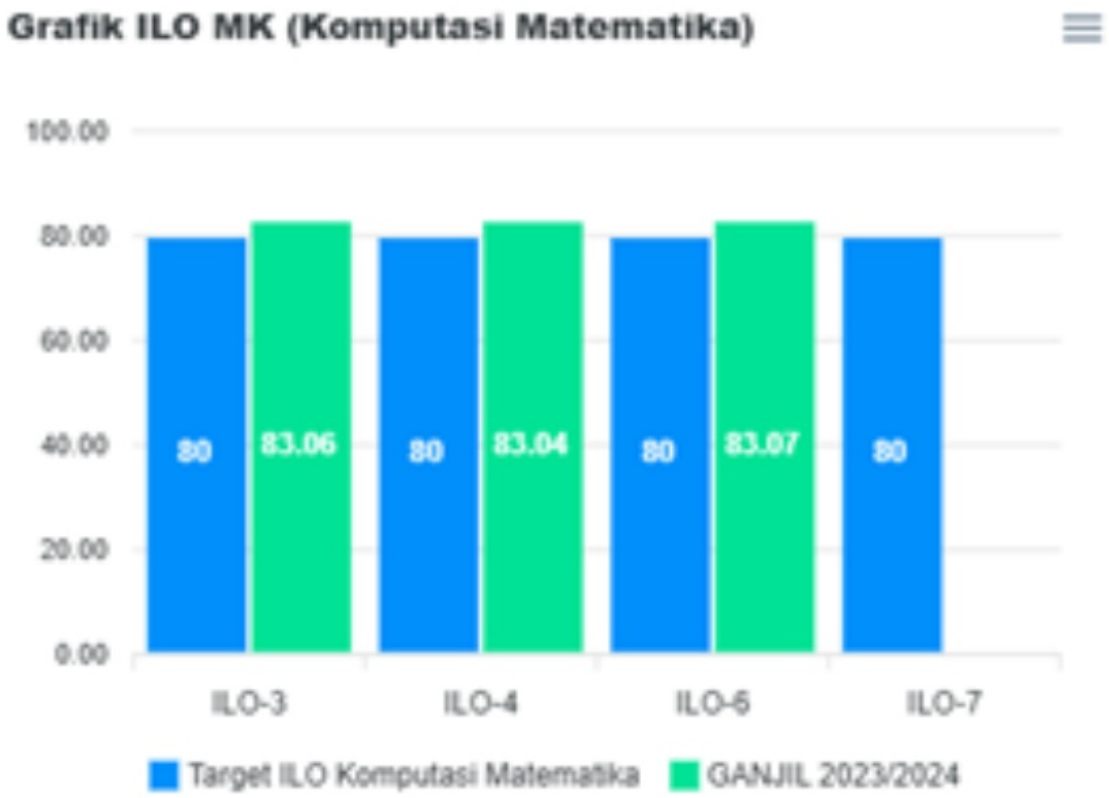
(data source: items / narratives of the results of the MK evaluation questionnaire by students)

Hasil Evaluasi Pembelajaran Matakuliah Komputasi Matematika









Hasil Perhitungan CPL Mata Kuliah Komputasi Matematika

4. Analysis and Reflection

Analysis and Reflection

Analysis

Analysis of the data shows that the performance of the Mathematical Computation Course in the measurable aspects is at a very good and satisfactory level. Learning outcomes in this area consistently exceed the targets set and show a high level of stability among the various aspects evaluated. However, the analysis also revealed crucial deficiencies in the evaluation process, where one of the learning outcomes that should have been measured had no outcome data at all, indicating incompleteness in the monitoring process.

Reflection

Excellent performance in most areas reflects the design and implementation of the course, especially with regard to aspects computing, has run very effectively. However, the absence of data for one of the learning outcomes is a critical reflection on the integrity of the evaluation process itself. This shows that there are weaknesses in monitoring procedures that need to be immediately corrected, because without complete data, a comprehensive evaluation of course success cannot be carried out in an accountable and comprehensive manner.

5. Follow-up Plan

In response to evaluation findings in the Mathematical Computational Course, which showed incomplete achievement data, the follow-up plan will prioritize improvements to the monitoring and evaluation process to ensure all aspects of learning can be measured accountably. In parallel, teaching and assessment practices that have proven highly effective in promoting superior outcomes in measurable

areas will be documented and standardized. The goal is to ensure the integrity of the evaluation system as a whole while maintaining and replicating the excellence achieved in subsequent evaluation periods.

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

Following up on the findings of the previous semester's evaluation for the Mathematical Computation Course, which identified superior performance in the majority of CPLs that had been implemented according to the RPS. However, learning outcomes have not yet been fully measured and have not consistently maintained superior levels of performance that exceed targets.

Makassar, 21 Oktober 2025

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