COURSE PORTFOLIO

Study Program	:	MATHEMATICS - S1
Semester	:	ODD 2023/2024
Course Code	:	23H01120403
Course Name	:	Graph Theory
Coordinator	:	Prof. Dr. Hasmawati, M.Si.
Lecturer Team Member	:	Dr. Ong Siew Hui, Prof. Dr. Nurdin, S.Si., M.Si., Prof. Dr. Hasmawati, 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
Graph Theory A	Prof. Dr. Hasmawati, M.Si.	:	8 times	
	Prof. Dr. Nurdin, S.Si., M.Si.	:	8 times	Number of students: 45 persons
	Dr. Ong Siew Hui	:	times	Presence ≥ 80% : 40 persons (88.89 %) Presence < 80% : 4 persons (8.89 %)
	Total Meeting : 16 times.			
Graph Theory B	Prof. Dr. Hasmawati, M.Si.	:	8 times	
	Prof. Dr. Nurdin, S.Si., M.Si.	:	8 times	Number of students: 37 persons
	Dr. Ong Siew Hui	:	times	Presence ≥ 80% : 31 persons (83.78 %) Presence < 80% : 6 persons (16.22 %)
	Total Meeting : 16 times.			

Materials/practicum provided

1. isomorphism, matrix graph, and enumeration (isomorphism, matrix graph, and enumeration)

2. Trees, Euler graphs, Hamilton graphs, planar graphs and connected tree graphs, Euler graphs, Hamilton graphs, planar graphs, and directed graphs)

3. Connectivity

4. Matching and factorization

5. Coloring graph and its application(Coloring graph and it's application)

6. Fuzzy Coloring

7. Location Coloring

The learning methods implemented

Small Group Discussion, Case Study, Self-Directed Learning, Collaborative Learning

The assessment method implemented

1. Project Report
2. Group task
3. Presentation
4. Short Q&A
5. Mid Test
6. 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)
KK1	CLO-1	Short Q&A	5.00 %	85.18
KK1	CLO-2	Group task	10.00 %	85.62
KK1	CLO-2	Independent Assignment	10.00 %	84.89
KK1	CLO-2	Project Report	15.00 %	84.82
KK3	CLO-3	Project Report	20.00 %	85.35
KK3	CLO-3	Presentation	15.00 %	85.12
KK3	CLO-3	Project Report	15.00 %	84.82
KK3	CLO-3	Mid Test	10.00 %	84.76
KK3	CLO-5	Project Report	15.00 %	84.82
KU1	CLO-2	Project Report	15.00 %	84.82
KU1	CLO-2	Independent Assignment	10.00 %	84.89
KU1	CLO-2	Group task	10.00 %	85.62
KU1	CLO-4	Project Report	15.00 %	84.82
S2	CLO-3	Mid Test	10.00 %	84.76

LOs that are charged to the Course	CLO	Assessment Form	Weight	Average student score (0-100)
S2	CLO-3	Presentation	15.00 %	85.12
S2	CLO-3	Project Report	15.00 %	84.82
S2	CLO-3	Project Report	20.00 %	85.35

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	100.00%
CLO-2	100.00%
CLO-3	100.00%
CLO-4	100.00%
CLO-5	100.00%

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.

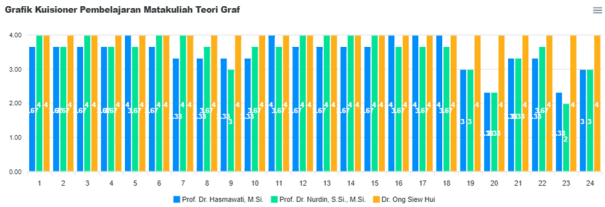
Course Grade

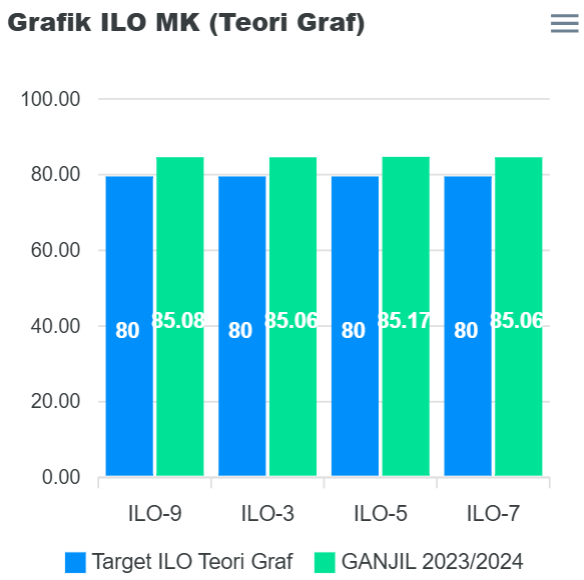
Course Grade	Number and Percentage of Students
A	43 (52.4%)
A-	39 (47.6%)
B+	0 (0.0%)
B	0 (0.0%)
B-	0 (0.0%)
C+	0 (0.0%)
C	0 (0.0%)
D	0 (0.0%)
E	0 (0.0%)

3. Learning evaluation (survey) results

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

Hasil Evaluasi Pembelajaran Matakuliah Teori Graf





Hasil Perhitungan CPL Mata Kuliah Teori Graf

4. Analysis and Reflection

Analysis and Reflection

Analysis

Analysis of the data shows that the performance in the Graph Theory Course is at a very good and satisfactory level. Learning outcomes in all measured aspects have consistently succeeded in meeting and even exceeding the targets set. In addition, the performance shown is very even and stable across all learning outcomes, without any significant gaps between one area and another, which indicates the success of the comprehensive learning process in that period.

Reflection

This superior and consistent performance reflects that the course design and implementation has been very effective. There is strong alignment between the teaching process, the material provided, and the evaluation system, so that students are able to achieve learning goals very well. Therefore, follow-up for this course is no longer corrective, but focuses on efforts to maintain existing standards of excellence. The reflection is the importance of documenting existing good practices and continuing to carry out

continuous optimization to maintain consistent quality in the future.

5. Follow-up Plan

In response to the excellent and consistent achievements in the Graph Theory Course, where all learning targets were successfully exceeded, the follow-up plan is not remedial in nature, but focuses on standardization of good practices and quality sustainability. This step will include official documentation of teaching methods and evaluation systems that have been proven effective to serve as reference models, as well as ongoing monitoring to ensure these standards of excellence are maintained. The main goal is to maintain consistent high performance and make this course a model for others.

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

Following up on the findings of the previous semester's evaluation for the Graph Theory Course, which showed very superior performance and consistently exceeding targets, an action plan that focuses on standardizing good practices and optimizing has been implemented. Furthermore, it is necessary to maintain quality stability and carry out continuous innovation to maintain the standards of excellence that have been achieved.

Makassar, 21 Oktober 2025

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