

COURSE PORTFOLIO

Study Program : MATHEMATICS - S1
 Semester : EVEN 2023/2024
 Course Code : 23H01110604
 Course Name : Algorithms and Programming
 Coordinator : Dr. Khaeruddin, M.Sc.
 Lecturer Team Member : Dr. Khaeruddin, M.Sc., 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
Algorithms and Programming A	Prof. Dr. Jeffry Kusuma	: times	Number of students: 40 persons Presence ≥ 80% : Presence < 80% :
	Dr. Khaeruddin, M.Sc.	: times	
	Total Meeting : times.		
Algorithms and Programming B	Prof. Dr. Jeffry Kusuma	: times	Number of students: 38 persons Presence ≥ 80% : Presence < 80% :
	Dr. Khaeruddin, M.Sc.	: times	
	Total Meeting : times.		

Materials/practicum provided

1. Definition of Algorithm, Paradigm of Programming, Algorithm Notation)
2. Introduction to programming language, variables, data types and operators in programming languages (Introduction to Programming language, variables, operators)
3. Conditional Branching
4. Looping
5. Arrays
6. Sub programs in the form of functions and procedures
7. Error Handling

The learning methods implemented

Meeting 1-2

Lecture: Discovery Learning

TM:2x3x50

Meeting 3

Lecture: Discovery Learning

TM:3x50

4-5 Meetings

Lecture: Discovery Learning

TM:2x3x50

6-8 Meetings

Lecture: Case Study (Case Study) Group Assignments in week 6-7:

1. Students dig ideas by doing journal literature study, web, or references other 2. The lecturer gives assignment to each group

TM:2x3x50

Lectures: Case Study

Group Presentation in week 8: Student present the results discussion in class and responded to directly by other students, the lecturer acts as facilitator

TM:3x50

9-10 Meetings

Lecture: Discovery Learning

TM:2x3x50

11-12 Meeting

Lecture: Discovery Learning

TM:2x3x50

13-14 Meeting

Lecture: Discovery Learning

TM:2x3x50

15-16 Meeting

Lecture: Case Study (Case Study)

Group Assignments in week 15:

1. Students dig ideas by doing journal literature study, web, or references other 2. The lecturer gives assignment to each group

TM:3x50

Lectures: Case Study (Case Study)

Group Presentation at week 16: Student present the results discussion in class and responded to directly by other students, the lecturer acts as facilitator

TM:3x50

The assessment method implemented

1. Quiz
2. Case Studies
3. 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	Independent Assignment	15.00 %	81.65
ILO 1	CLO-1	Case Studies	25.00 %	82.36
ILO 1	CLO-1	Quiz	10.00 %	81.12
ILO 1	CLO-4	Quiz	10.00 %	81.12
ILO 1	CLO-4	Independent Assignment	15.00 %	81.71
ILO 1	CLO-4	Case Studies	25.00 %	82.36
KK2	CLO-2	Independent Assignment	15.00 %	81.71
KK2	CLO-2	Case Studies	25.00 %	82.36
KK2	CLO-2	Quiz	10.00 %	81.12
KK3	CLO-2	Independent Assignment	15.00 %	81.71
KK3	CLO-2	Case Studies	25.00 %	82.36
KK3	CLO-2	Quiz	10.00 %	81.12
KK3	CLO-3	Independent Assignment	15.00 %	81.71
KK3	CLO-3	Case Studies	25.00 %	82.36
KK3	CLO-3	Quiz	10.00 %	81.12
KK3	CLO-4	Quiz	10.00 %	81.12
KK3	CLO-4	Case Studies	25.00 %	82.36
KK3	CLO-4	Independent Assignment	15.00 %	81.71
S2	CLO-4	Quiz	10.00 %	81.12
S2	CLO-4	Independent Assignment	15.00 %	81.71
S2	CLO-4	Case Studies	25.00 %	82.36
KK1	CLO-1	Case Studies	25.00 %	82.36
KK1	CLO-1	Quiz	10.00 %	81.12
KK1	CLO-1	Independent Assignment	15.00 %	81.65
KK1	CLO-2	Quiz	10.00 %	81.12

LOs that are charged to the Course	CLO	Assessment Form	Weight	Average student score (0-100)
KK1	CLO-2	Case Studies	25.00 %	82.36
KK1	CLO-2	Independent Assignment	15.00 %	81.71

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	84.62%
CLO-2	87.18%
CLO-3	87.18%
CLO-4	87.18%

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 (19.2%)
A-	56 (71.8%)
B+	6 (7.7%)
B	0 (0.0%)
B-	0 (0.0%)
C+	0 (0.0%)
C	0 (0.0%)
D	0 (0.0%)
E	1 (1.3%)

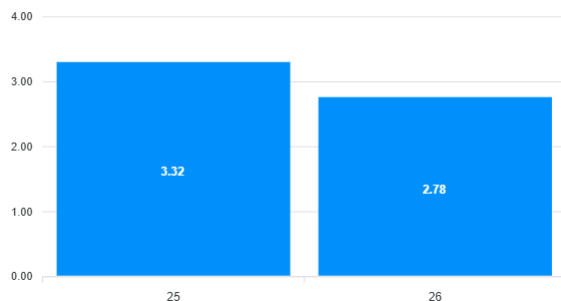
3. Learning evaluation (survey) results

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

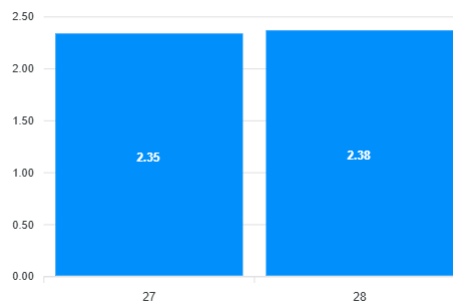
Grafik Kuisioner Pembelajaran Matakuliah Algoritma dan Pemrograman



Grafik Kuisioner Pembelajaran



Grafik Kuisioner Pembelajaran



Keterangan Nilai

Pertanyaan 1-24:

- 4 : Sangat Setuju/ Sangat Baik
- 3 : Setuju / Baik
- 2 : Ragu-ragu / Cukup
- 1 : Tidak Setuju / Kurang

Pertanyaan 25 dan 26: (WE = Waktu Efektif)

- 5 : WE > 200 menit
- 4 : 180 menit < WE <= 200 menit
- 3 : 120 menit < WE <= 180 menit
- 2 : 60 menit < WE <= 120 menit
- 1 : 1WE <= 60 menit

Pertanyaan 27:

- 3 : Lebih Banyak
- 2 : Sama
- 1 : Lebih Sedikit

Pertanyaan 28:

- 3 : Sama
- 2 : Cukup Sesuai
- 1 : Kurang Sesuai

Informasi Pertanyaan Kuisioner

1. Dosen Menyampaikan Rancangan Pembelajaran Semester (RPS) dan Kontrak Perkuliahan di awal Perkuliahan dengan Jelas

4. Dosen menjelaskan materi dengan baik dan jelas

7. Dosen Memberikan Penilaian dengan jelas dan sesuai dengan kontrak perkuliahan yang telah disepakati

10. Matakuliah yang diberikan menstimulasi kemampuan intelektual saya

13. Jadwal matakuliah telah diinformasikan di SIM secara jelas sebelum perkuliahan dimulai

16. Dosen menyelesaikan perkuliahan tepat waktu sesuai dengan jadwal kuliah yang telah ditetapkan

19. Selama Kualiah daring, fasilitas perkuliahan cukup memadai

22. Beban sks matakuliah ini sudah sesuai dengan kompetensi yang akan dicapai (Catatan : 1 sks setara dengan 170 menit kegiatan belajar setiap pekan per semester)

25. Rata-rata Waktu Efektif (dalam menit) yang anda habiskan dalam seminggu (di luar jam perkuliahan) untuk menyelesaikan tugas terstruktur pada matakuliah ini

28. Alokasi waktu yang digunakan untuk menyelesaikan tugas yang diberikan matakuliah ini

2. Dosen Menjalankan Proses Pembelajaran yang berpusat pada mahasiswa (Student Centered Learning)

5. Dosen memberikan materi setiap minggu sesuai dengan Rancangan Pembelajaran Semester (RPS) matakuliah

8. Dosen memberikan umpan balik dengan memberikan komentar secara lengkap

11. Tingkat kehadiran saya dalam matakuliah ini sangat tinggi (lebih dari 80% pertemuan)

14. Dosen memberikan kuliah sesuai dengan jadwal kuliah yang telah ditetapkan

17. Tersedia buku acuan/modul/ringkasan materi/slide matakuliah untuk semua materi yang diberikan

20. Saya menggunakan SIKOLA sebagai wadah pembelajaran

23. Saya menggunakan SIKOLA sebagai wadah pembelajaran

26. Rata-rata Waktu Efektif (dalam menit) yang anda habiskan dalam seminggu (di luar jam perkuliahan) untuk belajar mandiri pada matakuliah ini

3. Dosen Menyiapkan materi Pembelajaran dan sumber daya pendukung pembelajaran (diktat, slide, kasus, tugas, bahan ujian, dsb)

6. Dosen mempunyai kepedulian dan membantu mahasiswa dalam pemahaman penguasaan suatu materi

9. Saya memahami materi kuliah setelah menyelesaikan perkuliahan ini

12. Dosen menggunakan lebih dari satu metode penilaian (Assessment Methods)

15. Dosen hadir tepat waktu sesuai dengan jadwal kuliah yang telah ditetapkan

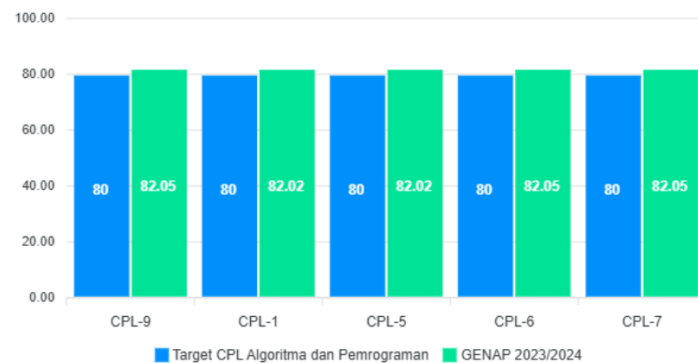
18. Buku acuan/modul/ringkasan materi/slide matakuliah yang diberikan benar dan up to date dengan perkembangan yang ada

21. Layanan Perpustakaan Prodi/Departemen/Fakultas/Universitas sangat membantu dalam proses pembelajaran

24. Layanan Perpustakaan Prodi/Departemen/Universitas sangat membantu dalam proses pembelajaran

27. Dibandingkan dengan matakuliah yang lainnya, jumlah waktu yang anda habiskan khusus untuk matakuliah ini

Grafik CPL MK (Algoritma dan Pemrograman)



Hasil Pengukuran CPL MK Algoritma dan Pemrograman

4. Analysis and Reflection

Analysis and reflection

Analysis

Analysis of the data shows that the performance of the Algorithms and Programming Course is at a very good and satisfactory level. Learning outcomes in all measured aspects have consistently succeeded in meeting and even slightly exceeding the set targets. Apart from that, the performance shown was 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 during that period.

Reflection

This superior and consistent performance reflects that the design and implementation of the course has run very effectively. 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 good practices that are already underway 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 Algorithms and Programming 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, practicum modules, and evaluation systems that have been proven effective to serve as reference models. The main goal is to maintain consistent high performance in future course implementation and make it a model for other basic courses.

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

Follow-up implementation that focuses on standardizing good practices has succeeded in maintaining performance at a satisfactory level, so that quality

maintenance needs to be carried out continuously in the following semester.

Makassar, 21 Oktober 2025

Dr. Khaeruddin, M.Sc.
NIP 196509141991031003