

## COURSE PORTFOLIO

Study Program	: MATHEMATICS - S1
Semester	: ODD 2024/2025
Course Code	: 23H01120303
Course Name	: Probability Theory
Coordinator	: Nur Rohmah Oktaviani Putri, S.Si., M.Si
Lecturer Team Member	: Nur Rohmah Oktaviani Putri, S.Si., M.Si, Dr. Firman, 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
Probability Theory A	Dr. Firman, S.Si.,M.Si.	: 8 times	Number of students: 45 persons
	Nur Rohmah Oktaviani Putri, S.Si., M.Si	: 8 times	Presence ≥ 80% : 42 persons (93.33 %) Presence < 80% : 3 persons (6.67 %)
	Total Meeting : 16 times.		
Probability Theory B	Dr. Firman, S.Si.,M.Si.	: 8 times	Number of students: 33 persons
	Nur Rohmah Oktaviani Putri, S.Si., M.Si	: 8 times	Presence ≥ 80% : 31 persons (93.94 %) Presence < 80% : 2 persons (6.06 %)
	Total Meeting : 16 times.		

### Materials/practicum provided

1. Introduction to Probability Theory
2. Multivariate distributions
3. Some special distributions
4. Distribution of function of random variables
5. Limit distribution (Limiting distributions)

### The learning methods implemented

#### Meeting 1

Lecture: Group discussion (Small Group Discussion)

TM:3x50

#### 2-3 Meetings

Lecture: Discovery Learning

TM:2x3x50

#### Meeting 4

Lecture: Discovery Learning

TM:3x50

#### 5th Meeting

Lecture: Discovery Learning

TM:3x50

#### 6-7th Meeting

Other Forms: Case Study (Case Study) Group assignments for the week 6th:

1. Students dig ideas by doing journal literature study, web, or references other 2. The lecturer gives the task goes down straight away to the field to each group for to look for cases which can implemented to in theoretical concepts opportunity

TM:3x50

Other Forms: Case Study (Case Study)

Group Presentation at week 7: Student present the results discussion in class and responded to directly by students others, the lecturer takes action as a facilitator

TM:3x50

#### Meeting 8

MID Test

Meeting 9-10

Lecture: Group discussion (Small Group Discussion), Discovery Learning

TM:2x3x50

11-12 Meeting

Lecture: Discovery Learning Quiz in week 12

TM:2x3x50

Meeting 13

Lecture: Discovery Learning

TM:3x50

14-15 Meeting

Lecture: Case Study (Case Study)

1. The lecturer gives some cases or real problem

2. Students dig related ideas with this case through literature study journal, web, or other references and model it to in function distribution

TM:3x3x50

16th Meeting

Final Semester Exam

#### The assessment method implemented

1. Quiz
2. Case Studies
3. Final Test
4. Mid Test
5. Independent Assignment

#### Supplementary information (if available)

None

#### 2. Learning Outcomes

##### Measurement results of CLO

Assessment and Evaluation of Student Achievement of CLO<sup>a</sup>

LOs that are charged to the Course	CLO	Assessment Form	Weight	Average student score (0-100)
ILO 1	CLO-1	Case Studies	25.00 %	18.68
ILO 1	CLO-1	Final Test	15.00 %	6.50
ILO 1	CLO-1	Mid Test	15.00 %	12.49
ILO 1	CLO-2	Independent Assignment	5.00 %	2.43
ILO 1	CLO-2	Quiz	5.00 %	3.16
ILO 1	CLO-2	Final Test	15.00 %	6.50
ILO 1	CLO-2	Case Studies	25.00 %	18.27
ILO 1	CLO-2	Mid Test	15.00 %	12.49
P2	CLO-3	Independent Assignment	5.00 %	2.43
P2	CLO-3	Final Test	15.00 %	6.50
P2	CLO-3	Mid Test	15.00 %	12.49
P2	CLO-3	Quiz	5.00 %	3.16
P2	CLO-4	Mid Test	15.00 %	12.49
P2	CLO-4	Case Studies	25.00 %	17.87
P2	CLO-4	Quiz	5.00 %	2.68
P2	CLO-4	Final Test	15.00 %	6.50
KK1	CLO-5	Case Studies	25.00 %	18.27
KK1	CLO-5	Final Test	15.00 %	6.50
KK3	CLO-5	Case Studies	25.00 %	18.27
KK3	CLO-5	Final Test	15.00 %	6.50

a: result criteria: very satisfactory if the average score is  $\geq 80$ ; 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<sup>b</sup>

(data source: student scores per assessment according to CLOs)

CLO	% of students who achieved a CLO score of at least 80
-----	---

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.

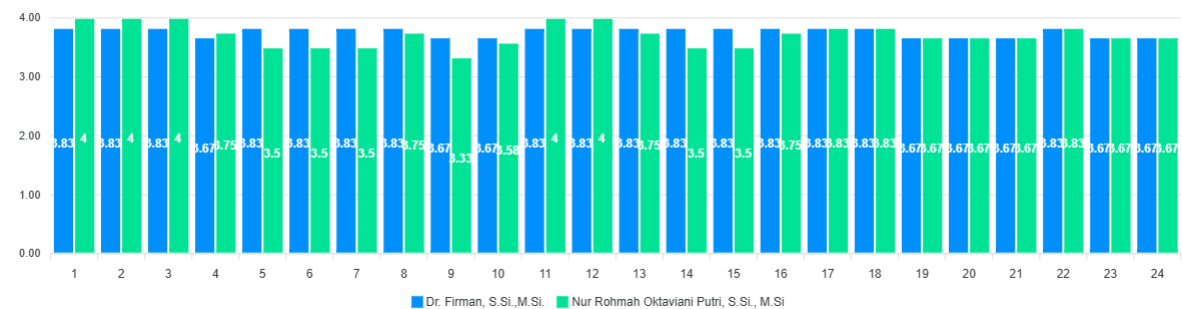
Course Grade

Course Grade	Number and Percentage of Students
A	8 (10.3%)
A-	8 (10.3%)
B+	23 (29.5%)
B	10 (12.8%)
B-	13 (16.7%)
C+	2 (2.6%)
C	3 (3.8%)
D	2 (2.6%)
E	9 (11.5%)

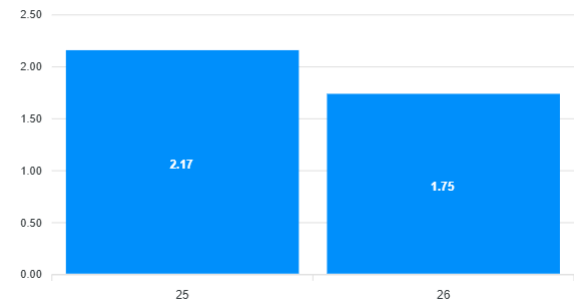
3. Learning evaluation (survey) results

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

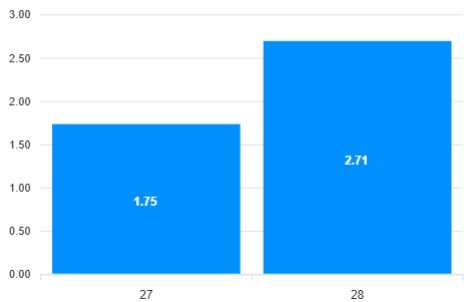
Grafik Kuisioner Pembelajaran Matakuliah Teori Peluang



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
2. Dosen Menjalankan Proses Pembelajaran yang berpusat pada mahasiswa (Student Centered Learning)
3. Dosen Menyiapkan materi Pembelajaran dan sumber daya pendukung pembelajaran (diktat, slide, kasus, tugas, bahan ujian, dsb )
4. Dosen menjelaskan materi dengan baik dan jelas
5. Dosen memberikan materi setiap minggu sesuai dengan Rancangan Pembelajaran Semester (RPS) matakuliah
6. Dosen mempunyai kepedulian dan membantu mahasiswa dalam pemahaman penguasaan suatu materi
7. Dosen Memberikan Penilaian dengan jelas dan sesuai dengan kontrak perkuliahan yang telah disepakati
8. Dosen memberikan umpan balik dengan memberikan komentar secara lengkap
9. Saya memahami materi kuliah setelah menyelesaikan perkuliahan ini
10. Matakuliah yang diberikan menstimulasi kemampuan intelektual saya
11. Tingkat kehadiran saya dalam matakuliah ini sangat tinggi (lebih dari 80% pertemuan )
12. Dosen menggunakan lebih dari satu metode penilaian (Assessment Methods)
13. Jadwal matakuliah telah diinformasikan di SIM secara jelas sebelum perkuliahan dimulai
14. Dosen memberikan kuliah sesuai dengan jadwal kuliah yang telah ditetapkan
15. Dosen hadir tepat waktu sesuai dengan jadwal kuliah yang telah ditetapkan
16. Dosen menyelesaikan perkuliahan tepat waktu sesuai dengan jadwal kuliah yang telah ditetapkan
17. Tersedia buku acuan/modul/ringkasan materi/slide matakuliah untuk semua materi yang diberikan
18. Buku acuan/modul/ringkasan materi/slide matakuliah yang diberikan benar dan up to date dengan perkembangan yang ada
19. Selama Kuliah daring, fasilitas perkuliahan cukup memadai
20. Saya menggunakan SIKOLA sebagai wadah pembelajaran
21. Layanan Perpustakaan Prodi/Departemen/Fakultas/Universitas sangat membantu dalam proses pembelajaran
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)
23. Saya menggunakan SIKOLA sebagai wadah pembelajaran
24. Layanan Perpustakaan Prodi/Departemen/Universitas sangat membantu proses pembelajaran
25. Rata-rata Waktu Efektif (dalam menit) yang anda habiskan dalam seminggu (di luar jam perkuliahan) untuk menyelesaikan tugas terstruktur pada matakuliah ini
26. Rata-rata Waktu Efektif (dalam menit) yang anda habiskan dalam seminggu (di luar jam perkuliahan) untuk belajar mandiri pada matakuliah ini
27. Dibandingkan dengan matakuliah yang lainnya, jumlah waktu yang anda habiskan khusus untuk matakuliah ini
28. Alokasi waktu yang digunakan untuk menyelesaikan tugas yang diberikan matakuliah ini

#### Grafik ILO MK (Teori Peluang)



Hasil Pengukuran CPL MK Teori Peluang

#### 4. Analysis and Reflection

##### Analysis and Reflection

##### Analysis

##### 1. Performance Collapse from Superior Level to Below Standard Level

Data analysis shows a very drastic and systemic collapse in performance. Courses which in the Odd 2023/2024 period showed very superior performance with all CPLs exceeding the target of 80 (average score 83), in the Odd 2024/2025 period fell significantly. The entire CPL is now well below target, with a low score range of 60 to 65.

##### 2. Sharper Decline Pattern in Early CPL

Even though the decline occurred in all areas, the pattern was not uniform. The sharpest and most severe decline occurred in initial learning outcomes, namely CPL-1 and CPL-2, both of which fell by around 22 points to level 61. Meanwhile, CPL-5 and CPL-6 also experienced a significant decline, but with a slightly smaller difference, namely around 18 points.

##### Reflection

##### 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—most likely—the implementation of a new final evaluation system that has proven to be ineffective.

##### 2. Difficulty in Basic Concepts as the Root of the Problem

The most severe decline occurred in the initial CPL (CPL-1 and CPL-2) reflecting that the root of the problem most likely lies in students' failure to master basic or fundamental concepts at the start of the course. Failure to build this strong foundation will logically have a cascading impact on their ability to understand advanced topics (CPL-5 and CPL-6), even if the decline is not as severe as at the start. Therefore, remedial investigations must prioritize the delivery and evaluation of basic materials.

#### 5. Follow-up Plan

At the end of this semester, it can be seen that learning outcomes are below the CPL target. This is a serious concern in efforts to maintain the quality of the learning process. Based on the analysis of final evaluation results and attendance, as well as interactions during lectures, several causal factors identified include:

- Students' unfamiliarity with the newly implemented case base method
- Lack of student preparation and understanding of basic material.
- Limited time in exploring conceptual and technical topics
- Low active involvement in class discussions and group assignments.

As a form of academic responsibility, a follow-up plan is prepared as follows:

### 1. **Providing Additional (Remedial) Sessions**

Students who get a D or E will be given the opportunity to take additional sessions to deepen the material. The approach is based on discussion and practice questions with direct guidance.

### 2. **Individual Academic Counseling**

Opening a special time for students to consult regarding learning difficulties, study strategies and managing their academic time.

### 3. **Review of Teaching Methods**

In the next semester, there will be socialization regarding the Case Study learning method and increasing the variety of learning with additional teaching materials such as videos, material summaries, or independent practice questions. And there will be more involvement of students in real-world problem-based learning so that the material feels more relevant and interesting

---

- 

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

In the semester Currently, student achievement shows a decline compared to the previous semester. After analyzing the learning process this semester, several possible causes for the decline in results include:

- Different class compositions, with a background of readiness academics are more varied.
- Decreased student learning motivation, students are less enthusiastic about learning.

Strategies that were successful in the previous semester have not been fully effective again , because:

- The case study/pjbl-based learning format cannot be implemented optimally due to time constraints.
- Today's students show a tendency to be more passive in open discussions.
- Quizzes and routine formative evaluations are no longer used as material for reflection by most students.

Makassar, 15 Oktober 2025

Nur Rohmah Oktaviani Putri, S.Si., M.Si  
NIP 199210062020016001