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**Student Satisfaction Survey Report on Educational Services in 2022**

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Faculty of Mathematics and Natural Sciences



FACULTY QUALITY ASSURANCE TEAM  
2022

## KATA PENGANTAR

Alhamdulillah dan puji syukur kepada Allah SWT, penyusunan Laporan Hasil Survey Kepuasan Mahasiswa terhadap Sistem Pendidikan Fakultas Matematika dan Ilmu Pengetahuan Alam (FMIPA) Universitas Tanjungpura (UNTAN) Pontianak tahun 2022 telah dapat diselesaikan. Pelaksanaan survey dan penyusunan laporan ini tidak terlepas bantuan dan dukungan dari seluruh sivitas akademika FMIPA UNTAN. Oleh karena itu dalam kesempatan ini kami menyampaikan ucapan terima kasih kepada seluruh pihak yang telah membantu mulai dari persiapan survey, pelaksanaan, pengolahan data, sampai selesainya laporan survey ini.

1. Pimpinan FMIPA UNTAN yang telah memberikan dukungan dan fasilitas atas terselenggaranya survey Kepuasan mahasiswa terhadap Sistem Pendidikan FMIPA sampai dengan penyelesaian laporan hasil survey
2. Seluruh mahasiswa FMIPA UNTAN yang telah meluangkan waktu untuk berpartisipasi dalam pengisian angket survey secara daring.
3. Semua pihak yang telah memberikan bantuan dan dukungan yang tidak dapat kami sebutkan satu persatu.

Kami berharap laporan hasil survey kepuasan mahasiswa terhadap sistem pendidikan FMIPA UNTAN ini dapat memberikan masukan kepada pimpinan untuk melakukan evaluasi dan penentuan kebijakan yang tepat sehingga kualitas dapat kuantitas Kerjasama dapat terus meningkat. Kami menyadari dengan sepenuhnya bahwa hasil laporan survey kepuasan mahasiswa terhadap sistem Pendidikan FMIPA ini masih jauh dari kesempurnaan. Oleh karena itu, kritik dan masukan yang bersifat membangun sangat kami harapkan untuk disampaikan ke kami.

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## **FOREWORD**

All praise and gratitude be to Allah SWT, the preparation of the Student Satisfaction Survey Report on the educational process at the Faculty of Mathematics and Natural Sciences (FMIPA), Universitas Tanjungpura (UNTAN), Pontianak, for the year 2022 has been successfully completed. The implementation of the survey and the compilation of this report could not have been accomplished without the assistance and support of the entire FMIPA UNTAN academic community as well as research and community service collaboration partners. Therefore, on this occasion, we would like to extend our sincere appreciation to all parties who contributed to this endeavour—from the preparation of the survey, execution, data processing, to the completion of this report.

1. To the FMIPA UNTAN leadership for their support and facilitation in conducting the Student Satisfaction Survey and completing the report.
2. To all FMIPA UNTAN students who took the time to participate in the online questionnaire.
3. To all parties who provided assistance and support, whom we cannot mention individually.

We hope that this Student Satisfaction Survey Report on FMIPA UNTAN's educational service will provide valuable input for the leadership in conducting evaluations and determining appropriate policies, thereby continuously improving the quality and scope of collaboration. We fully acknowledge that this report is far from perfect. Therefore, constructive criticism and suggestions are warmly welcomed.

Pontianak, Oktober 2022

Team

## CHAPTER I INTRODUCTION

### 1.1 Background

User satisfaction with the quality of services provided by governmental or non-governmental organizations can significantly influence those institutions. Service quality reflects the total characteristics of a service concept that encompasses all aspects of service delivery, and its benchmark is the ability to satisfy customers or service recipients (Yulia, 2018).

As an educational institution responsible for ensuring the quality of all academic activities within the Faculty of Mathematics and Natural Sciences (FMIPA), Universitas Tanjungpura (UNTAN), the **Faculty Quality Assurance Team (PMF)** plays a vital role. The PMF is tasked with implementing quality assurance at FMIPA through the Internal Quality Assurance System (SPMI). Establishing a quality culture requires several key activities that support its success.

The internal quality assurance system relies on supporting data as a foundation for evaluation processing, derived from various stakeholders—including satisfaction measurements from students, lecturers, and educational staff. These measurements, along with the level of understanding, can be assessed through surveys conducted with valid and reliable scientific methods.

In addition, a quality management information system (SPMI) is also needed to enhance the efficiency of FMIPA's quality management performance. The ability to measure satisfaction with institutional services is deemed essential for identifying and evaluating the impact of institutional outcomes on stakeholders—as outlined in Appendix 1 of PerBAN-PT No. 2 of 2019 regarding the Study Program Accreditation Instrument (APS) and the Self-Evaluation Report (LED) Preparation Guide.

Such measurements are expected to identify the service quality level of the faculty and determine the necessary follow-up to improve or maintain the related service quality standards. Furthermore, PerBAN-PT No. 2 of 2019 states that satisfaction measurements must utilize valid, reliable, and user-friendly instruments.

Based on the above background, it is necessary to conduct a measurement of service quality through a satisfaction survey evaluation involving FMIPA's academic community—namely lecturers, students, and educational staff.

### 1.2 Survey Objectives

The objectives of conducting this survey are as follows:

1. To evaluate the extent to which students assess the educational processes implemented by the Faculty of Mathematics and Natural Sciences (FMIPA).
2. To measure the level of student satisfaction with FMIPA's educational process.
3. To provide feedback for efforts to improve the quality and quantity of FMIPA's educational process.

## CHAPTER II

### SURVEY METHODOLOGY

#### 2.1 Implementation Period

The survey activity was carried out during the months of **November–December 2021**.

#### 2.2 Sampling Technique

Student satisfaction survey data were collected using a **stratified random sampling (SRS)** technique, in which the population was initially divided into nine strata corresponding to the number of study programs within the Faculty of Mathematics and Natural Sciences (FMIPA). A number of samples were then randomly selected from each stratum, with varying sizes proportional to the number of students in each program.

This SRS technique was employed to eliminate potential bias that may arise from differences in service delivery at the program level, thus aiming to improve the precision and representativeness of the sample. In this context, the respondents were students who were asked to respond to a series of statements prepared in the survey form. Responses were collected using a closed-ended format, allowing respondents to select the option that best represented their perception, based on a **Likert scale** as shown below.

**Likert Scale Response Options**

i	Response Option	Score (r) i
1	Strongly Disagree	1
2	Disagree	2
3	Agree	4
4	Strongly Agree	5

**Response options indicating the level of respondent agreement with each statement item** were then accumulated and expressed as the respondents' **actual satisfaction level**.

The **cumulative satisfaction level** for statement item  $j$  is represented as a percentage of lecturer satisfaction  $S_j$ , calculated using the following formula:

$$S_j = \frac{\sum_{i=1}^5 r_i f_i}{n_d r_5} = x \ 100\%$$

where  $r_i$  = score of the  $i$ -th response option, and  $f_i$  = frequency of the  $i$ -th response. The resulting percentage value  $S_j$  can be categorized as follows:

### Satisfaction Category Based on Percentage Scores

Satisfactory $S_j$	Response Options
0% – 19.99%	Very Dissatisfied
20% – 39.99%	Dissatisfied
40% – 59.99%	Fair
60% – 79.99%	Satisfied
80% – 100.00%	Very Satisfied

#### A. Validity Testing

Sampling validity for determining the sample size was calculated using **Slovin's Formula** with a confidence level of **95%**. This sampling validity provides an indication of how accurately the sample represents the population. The validity level is calculated using the following formulation (Krippendorff, 2003):

$$\text{Sampling validity} = 1 - \text{sampling error}$$

#### B. Reliability Testing

Reliability of the survey instrument was assessed by calculating the **Cronbach's alpha** value for each statement item, using the data collected from the survey. A high correlation among statement items indicates that the survey instrument can be categorized as **reliable**.

#### C. Mean Score and Satisfaction Level

Respondents were asked to provide responses to the given statements. The **Satisfaction Level** was calculated by comparing the weighted average score to the maximum possible score. The assessment criteria were based on a **4-point Likert scale**, adjusted according to interval values and quality of understanding, as shown in the following table:

### Service Quality Classification Based on Average Score and Percentage Conversion

Perception Level	Score Interval	Percentage Conversion	Service Quality
1	1.00 – 1.75	25.00% – 43.75%	Poor
2	1.76 – 2.50	43.76% – 62.50%	Less Good
3	2.51 – 3.25	62.51% – 81.25%	Good
4	3.26 – 4.00	81.26% – 100.00%	Very Good

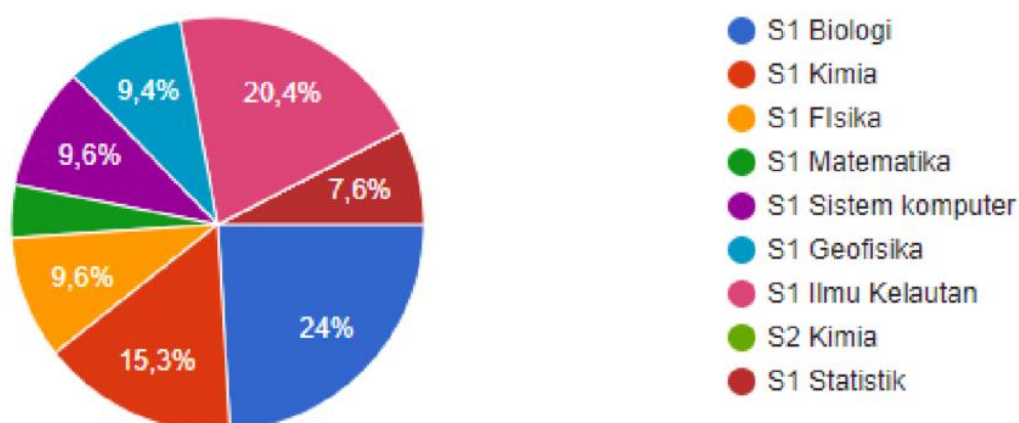
## CHAPTER IV RESULTS AND DISCUSSION

### A. Survey Results

The Student Satisfaction Survey regarding the educational process at FMIPA Untan was conducted during the period of **November to December 2024** by distributing an online questionnaire via **Google Forms**. The distribution of the questionnaire and the collection of respondents' answers were carried out by the **FMIPA UNTAN Quality Assurance Team**.

The total number of responses received was **437 respondents**, showing a significant increase compared to the previous year. The distribution of respondents is as follows:

Study Program	Respondents	Percentage (%)
Undergraduate Biology (S1)	105	24
Undergraduate Chemistry (S1) and Master (S2)	60	15.3
Undergraduate Physics (S1)	42	9.6
Undergraduate Mathematics (S1)	18	4.1
Undergraduate Computer Engineering (S1)	42	9.6
Undergraduate Geophysics (S1)	41	9.4
Undergraduate Marine Science (S1)	89	20.4
Master's Program in Chemistry (S2)	33	7.6
Statistics Program	105	24



### Student Survey Results on Academic Service Aspects

No.	Survey Item	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
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1	Supplementary teaching materials (handouts, modules, e-books, journals, links, etc.) are informed/provided to students to complement lecture content	1.60%	11.00%	55.60%	31.80%
2	Student issues/complaints are handled properly by the department through Academic Advisors (PA)	3.00%	14.00%	51.70%	31.40%
3	Student issues/complaints are handled properly by the department through counseling lecturers	3.00%	18.10%	53.80%	25.20%
4	Lecturers are willing to provide guidance/consultation outside scheduled class hours	2.70%	12.60%	54.00%	30.70%
5	Lecturers arrive on time	1.80%	11.00%	60.60%	26.50%
6	Lecture content aligns with the Semester Learning Plan (RPS) / Student Work Guidebook (BPKM)	0.70%	3.70%	56.80%	38.90%
7	Lecture material is clearly delivered by the lecturer	1.40%	10.10%	58.80%	29.70%
8	Time is provided for discussion and Q&A	0.90%	3.90%	49.20%	46.00%
9	Lecturers assess students objectively	0.70%	6.90%	58.10%	34.30%
10	The Study Program schedules lectures each semester	0.90%	3.20%	47.80%	48.10%
11	The Study Program schedules exams (midterms and finals) according to the academic calendar	2.70%	12.40%	44.90%	40.00%
12	Department/Study Program provides student services (e.g., thesis advisor/examiner, PL/Internship supervisor/examiner, comprehensive exam/thesis exam implementation)	0.70%	6.60%	55.10%	37.50%
13	Lecturer attendance aligns with the SKS workload	0.20%	7.80%	54.70%	37.30%
14	Exam questions are appropriate to the lecture material	1.10%	8.00%	57.40%	33.40%
15	Lecturers demonstrate ability to motivate students	1.60%	11.00%	53.30%	34.10%
16	Lecturers give practice exercises, assignments, or quizzes	0.50%	7.30%	53.50%	43.00%
17	Lectures stimulate critical thinking	1.40%	10.50%	51.70%	36.40%
18	Department/Study Program supports student (organizational) activities	0.90%	6.90%	53.50%	38.70%
19	Department/Study Program supports study completion	1.10%	5.90%	50.10%	42.80%



20	Lecturers are willing to assist students facing academic challenges	1.80%	9.20%	53.50%	35.50%
21	Lecturers demonstrate openness and cooperation with students	2.30%	7.60%	53.80%	36.40%

Based on respondents' answers to the survey instrument items, the **Satisfaction Level** was calculated using the **weighted average score**, compared against the maximum possible score. The resulting mean scores ranged from **3.29 to 3.97**, which fall under the **"Very Good"** category.

The evaluation criteria are based on a **4-point Likert scale**, calibrated by interval scores and qualitative understanding as shown in the table below:

**Table 2. Mean Scores and Service Quality Level Based on Likert Scale**

No.	Survey Item	Average Score	Satisfaction Level
1	Supplementary teaching materials (handouts/modules/e-books/journals/links, etc.) are informed/provided to students to complement lecture content	3.47	Very Good
2	Student issues/complaints are handled properly by the Department through Academic Advisors (PA)	3.75	Very Good
3	Student issues/complaints are handled properly by the Department through counselling lecturers	3.29	Very Good
4	Lecturers are willing to provide guidance/consultation outside class hours	3.42	Very Good
5	Lecturers arrive on time	3.97	Very Good
6	Lecture material aligns with the Semester Learning Plan (RPS) / Student Work Guidebook (BPKM)	3.65	Very Good
7	Lecture material is clearly delivered by the lecturer	3.72	Very Good
8	Time is provided for discussion and Q&A	3.56	Very Good
9	Lecturers assess students objectively	3.75	Very Good
10	The Study Program schedules lecture every semester	3.52	Very Good
11	The Study Program schedules exams (midterms and finals) according to the academic calendar	3.6	Very Good
12	Department/Study Program provides student services (e.g., thesis advisors/examiners, internship supervisors/examiners, implementation of comprehensive/thesis exams)	3.6	Very Good

13	Lecturer attendance aligns with credit hour (SKS) workload	3.53	Very Good
14	Exam questions correspond to lecture material	3.5	Very Good
15	Lecturers demonstrate the ability to motivate learning	3.71	Very Good
16	Lecturers provide exercises, assignments, or quizzes	3.53	Very Good
17	Lectures stimulate critical thinking	3.61	Very Good
18	Department/Study Program supports student (organizational) activities	3.66	Very Good
19	Department/Study Program supports students in completing their studies	3.53	Very Good
20	Lecturers are willing to help students experiencing academic challenges	3.47	Very Good
21	Lecturers demonstrate openness and cooperation with students	3.75	Very Good

## B. Students Satisfaction Survey on FMIPA UNTAN's Educational Process

### a. Validity and Reliability Testing of the Satisfaction Survey Instrument

The students satisfaction survey was conducted using a sample of **437 respondents**, drawn from **10 study programs** within the Faculty of Mathematics and Natural Sciences (FMIPA), Universitas Tanjungpura. These programs include Mathematics, Physics, Biology, Chemistry, Computer Engineering Systems, Marine Science, Statistics, Geophysics, Information Systems, and Master's Program in Chemistry. The survey included **21 instrument items** designed to assess lecturer satisfaction with FMIPA UNTAN's services.

**Validity testing** was carried out to evaluate whether each item effectively measures what it is intended to measure. A questionnaire item is considered **valid** if it performs its intended function and accurately captures the intended variable. In other words, an item is valid if it can effectively reflect the concept being assessed.

An instrument is deemed valid if it meets the criterion:

$$r_{xy} > r_{(\alpha:n-2)}$$

### b. Reliability Testing

Reliability testing is conducted to determine the consistency of a measurement instrument, typically using a questionnaire. The reliability coefficient is calculated using **Cronbach's Alpha**. The decision criteria for the reliability test are as follows:

1. If the **Cronbach's alpha value > 0.6**, the questionnaire is considered **reliable/consistent**.
1. If the **Cronbach's alpha value < 0.6**, the questionnaire is considered **not reliable/inconsistent**.

Using a sample size of **437 respondents** and a significance level of **5%**, the **critical r-value** from the table  $r(0.05; 28)$  was determined to be **0.433**. The calculated **item-total correlation coefficients** (r-calculated) for each item are presented as follows

**Table – Validity Testing of Student Satisfaction Survey Instrument**

No.	Survey Item	r-value (calculated)	r-table	Conclusion
1	Supplementary teaching materials (handouts/modules/e-books/journals/links, etc.) are informed/provided to complement lectures	0.728	0.433	Valid
2	Student issues/complaints are handled properly by the department through Academic Advisors (PA)	0.672	0.433	Valid
3	Student issues/complaints are handled properly by the department through counseling lecturers	0.709	0.433	Valid
4	Lecturers are willing to provide guidance/consultation outside class hours	0.69	0.433	Valid
5	Lecturers arrive on time	0.746	0.433	Valid
6	Lecture content aligns with the Semester Learning Plan (RPS) / Student Work Guidebook (BPKM)	0.706	0.433	Valid
7	Lecture material is clearly delivered by the lecturer	0.721	0.433	Valid
8	Time is provided for discussion and Q&A	0.746	0.433	Valid
9	Lecturers assess students objectively	0.707	0.433	Valid
10	The Study Program schedules lectures each semester	0.768	0.433	Valid
11	The Study Program schedules exams (midterms and finals) according to the academic calendar	0.733	0.433	Valid
12	The department provides student services (e.g., thesis advisors/examiners, internship supervisors, comprehensive exams, etc.)	0.663	0.433	Valid
13	Lecturer attendance matches credit load (SKS)	0.72	0.433	Valid
14	Exam questions correspond with lecture materials	0.754	0.433	Valid
15	Lecturers demonstrate the ability to motivate learning	0.805	0.433	Valid
16	Lecturers assign practice problems, quizzes, or tasks	0.718	0.433	Valid
17	Lectures stimulate critical thinking	0.751	0.433	Valid
18	The department/study program supports student organizations	0.712	0.433	Valid
19	The department/study program supports student completion of studies	0.765	0.433	Valid
20	Lecturers are willing to assist students facing academic challenges	0.791	0.433	Valid
21	Lecturers demonstrate openness and cooperation with students	0.774	0.433	Valid

**Based on the reliability analysis, the Cronbach's alpha value obtained was 0.917**, which exceeds the minimum threshold of 0.6. Therefore, the questionnaire is deemed to be **reliable and internally consistent**.

## Challenges, Obstacles, and Solutions

The implementation of quality measurement for FMIPA UNTAN's educational system revealed several challenges:

- **Uneven distribution of satisfaction surveys** was observed due to limited coordination and lack of timely information regarding survey administration schedules.
- **Low respondent interest** in completing online surveys hindered data collection.
- A major challenge was the **sincerity and honesty** of respondents, particularly when dissatisfaction led to reluctance in sharing negative experiences about service quality.

To address these challenges, the following solutions are recommended:

- Cultivate a strong sense of **awareness and responsibility** among all FMIPA UNTAN academic members regarding the purpose of quality surveys as tools for continuous service improvement.
- Implement satisfaction surveys **programmatically and consistently each year**, targeting the entire academic community to collect feedback, suggestions, and concerns.
- This cycle is essential for generating meaningful **feedback for ongoing service enhancement** at FMIPA UNTAN.

## Conclusion

The quality measurement of services conducted by the FMIPA UNTAN Quality Assurance Team yielded an **average score in the “Very Good” category**. Based on the calculated service quality interval of **3.29–3.97**, it is concluded that the overall service quality at FMIPA UNTAN has reached the classification of **VERY GOOD**.

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