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المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA



جامعة الجوف
Jouf University



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The Chemistry Program
in Jouf University
Key Performance Indicators Report

1440-1441



**Key Performance Indicators Data for Chemistry Program male and female students, Year 1440-1441 H.
With External Benchmark for Chemistry Program in Majmaah University and University of Jeddah.**

Code	Key Performance Indicators	Actual Benchmark 1440-1441			Target Benchmark	Internal Benchmark 1439-1440	External Benchmark		New Target Benchmark
		Male	Female	Overall			MU	UJ	
KPI-P- 01	Percentage of achieved indicators of the program operational plan objectives.	80 %			75%	74%	75 %	90 %	75%
KPI-P- 02	Students' Evaluation of quality of learning experience in the program	4.15	4.18	4.16	3.75	3.59	————	3.85	4.0
KPI- P - 03	Students' evaluation of the quality of the courses.	4.22	4.22	4.22	3.75	3.68	4.1	4.41	4.4
KPI- P - 04	Completion rate	23 %	51.16%	44.64%	40%	33.3%	————	58.05 %	45%
KPI- P - 05	First-year students retention rate	64.58%	97.72%	84.17 %	80%	98.4%	40 %	100 %	80%
KPI- P - 06	Students' performance in the professional and/or national examinations.	40%	38.37%	39.18 %	30%	10%	————	————	40%
KPI- P - 07	Graduates' employability and enrolment in postgraduate programs.	75 %	30.8 %	52.9%	60%	50%	————	60 %	60%
		0	0	0	3%	0	————	————	3%
KPI- P - 08	Average number of students in the class.	7	23	15	11	18	————	10	11
KPI- P - 09	Employers' evaluation of the program graduates proficiency.	3.95	4.2	4.07	3.75	3.61	————	————	4.0
KPI- P - 10	Students' satisfaction with the offered services.	3.4	3.7	3.55	3.5	3.1	3.91	————	3.75



KPI- P - 11	Ratio of students to teaching staff.	5.5: 1	15.3 : 1	10.4: 1	10:1	17.4:1	2 : 1	4 : 1	10:1
KPI- P - 12	Percentage of teaching staff distribution.	M. 67.25 % F. 32.75 % Assist. P: 64.62 % Assoc. P: 16.37% Prof.: 19.01 %			M. 67.25 % F. 32.75 % Assist. P:40 % Assoc. P:40 % Prof.: 20 %	A: M. 67.25 % F. 32.75 % Assist. P: 64.62 % Assoc. P: 16.37 Prof. 19.01	Lecturer: 21 % Assist. P: 72 % Assoc. P: 7 % Prof.: 0 %	Lecturer: 4.1 % Assist. P: 57 % Assoc. P: 23.6 % Prof.: 15.3 %	M. 67.25 % F. 32.75 % Assist. P:40 % Assoc. P:40 % Prof.: 20 %
KPI- P - 13	Proportion of teaching staff leaving the program.	0 %	6.6%	3.3 %	0%	6.75%	0 %	0 %	0%
KPI- P - 14	Percentage of publications of faculty members.	86 %	80 %	83 %	80%	51.5%	75 %	88.85 %	85%
KPI- P - 15	Rate of published research per faculty member.	2:1	1.2:1	1.6:1	2:1	1.12:1	2:1	1.83:1	2:1
KPI- P - 16	Citations rate in refereed journals per faculty member.	75.6:1	15.2:1	45.4:1	40:1	36:1	—	9.05:1	50:1
KPI- P - 17	Satisfaction of beneficiaries with the learning resources.	3.45	3.25	3.35	3.5	3.57	3.18	3.23	3.5
KPI- AP - 01	Number of research groups in the program	0	0	0	2	NA	NA	NA	2
KPI- AP - 02	The number of funded research projects that the program's employees obtain annually	12	2	14	15	13	NA	NA	15



KPI- AP - 03	Percentage of students participating in extra-curricular activities	84.8%	84.8%	84.8%	80%	NA	NA	NA	85%
KPI- AP - 04	Employers satisfaction with the program's mission, vision and goals	3.9	3.9	3.9	4.0	NA	NA	NA	4.0
KPI- AP - 05	Percentage of the student's graduation projects related to the surrounding community	20%	20%	20%	30%	NA	NA	NA	30%

The methodology for measuring and setting Key Performance Indicators (KPIs) for chemistry program in Jouf university

It aims to build and target key performance indicators, starting with understanding the performance indicators, passing through the process of formulating the indicator and ending with the process of managing the indicator, measuring its results, and developing plans for improvement based on these results.

The methodology for measuring and setting Key Performance Indicators (KPIs) for chemistry program in Jouf university, according to a set of sequential steps and using 22 performance indicators is defined in light of: (actual level / baseline / internal benchmarking / external benchmarking / environment analysis (potential, requirements and ambition) as approved by NCAAA

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that enhances the overall quality in the department processes and research production, and assists in qualifying them for institutional and academic accreditation, for more creativity and excellence.

In the following section, we will discuss the trend and the scenario of which of how the selected KPIs values calculated, verified and improved

1-At the end of the academic year, the Quality and Performance Indicators Committee meets, divides work, prepares evidence and documents for each of the main and additional performance indicators, and the internal audit verifies the integrity and accuracy of determining indicators.

2-Communication is carried out between the KPIs committee, program committees and the department council throughout the year to determine the targets of performance indicators and to determine the extent of its development through reports and data obtained compared to internal and external comparison

***Conclusion:* From the above explanation, one can predict to an extent with the values of the coming KPIs .**



General Remarks:

Name of the internal benchmark provider

Chemistry department in faculty of science at Jouf university.

● Name of the external benchmark.

Majmaah University (MU) and University of Jeddah (UJ)

● Why did you choose this external benchmark?

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

(i) Comparability of Infrastructural facilities required for the programs across KSA

(ii) Availability of data as required by the NCAAA.

Accordingly, Majmaah University (MU) and University of Jeddah (UJ)

were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.



KPI-P-01: Percentage of achieved indicators of the program operational plan objectives.

NCAA KPI Reference Number: KPI-P-01

KPI-P-01 for **Chemistry** Program in College of **Science, Sakaka**

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
70 %	75%	74%	MU	UJ	75%
			75 %	90 %	

KPI-P-01 : Percentage of achieved indicators of the program operational plan objectives..

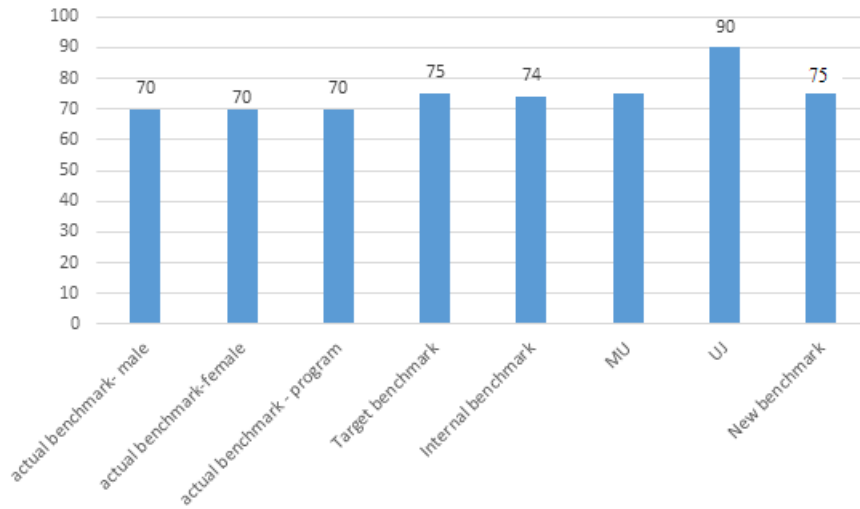


Figure 1: Percentage of achieved indicators of the Chemistry program operational plan objectives

The Measurement way: Percentage of performance indicators of the operational plan objectives of the program=



$$\frac{\text{Number of performance indicators for the objectives of the operational plan of the program that have achieved the target level}}{\text{The total number of indicators for these goals in the same year}} \times$$

100

Analysis (strengths and recommendations):

An actual benchmark indicator of 70% was accomplished which is less than the internal benchmark indicator (74%) and that of the external benchmark (Mu), UJ and the target.

The benchmark was calculated as percentage.

Last academic year was taken as internal benchmark

Majmaah University (MU) and University of Jeddah (UJ) were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

What did you use as the supported documents for KPIs calculation?

- 1- The operational plan
- 2- Annual report of the operational plan

 Cause:



The reasons that led to the failure to achieve the target performance indicator are: not satisfying all the topics of the operational plan policy

Result:

The program needs more continuous quality improvements.

🚩 Recommendations:

- 1- Adjust the operational plan

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-01	Adjust the operational plan	Prepare achievable operational plan	Operational plan committee	Program coordinator	1-9-2020	15-4-2021

KPI-P-02 : Students' Evaluation of quality of learning experience

KPI- P-02 for **Chemistry** Program in College of **Science**, Sakaka Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
4.16	3.75	3.59	_____	3.85	4.0

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
4.15	3.75	3.59	_____	3.85	4.0

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
4.18	3.75	3.59	_____	3.85	4.0

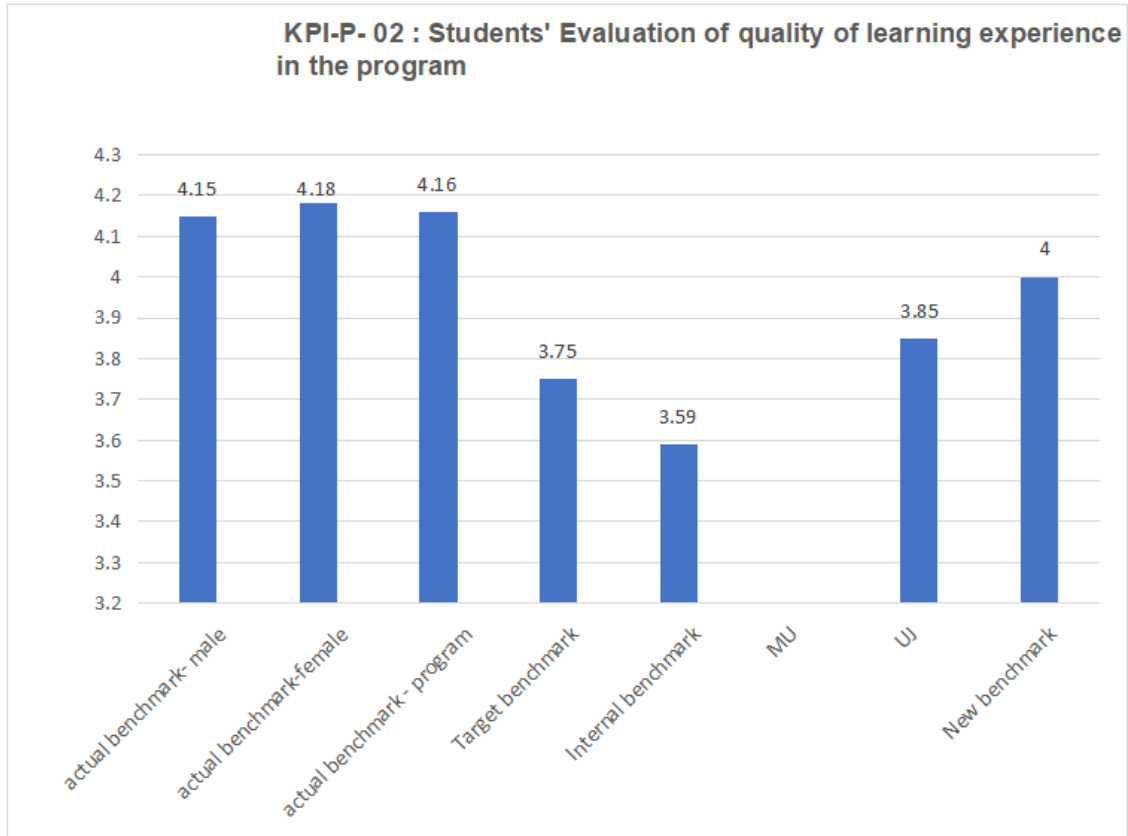


Figure 2:

The Students' evaluation of quality of learning experience in the Chemistry program.

The Measurement way: The application of a questionnaire to evaluate the final year students of the quality of learning experiences in the program on a scale from five levels in an annual survey.

- Student evaluation of the quality of learning experiences in the program= 4.16

Analysis

An actual benchmark indicator is 4.16 of 5.0 was accomplished which is higher than that of the internal benchmark indicator (3.59) and higher than that of the external



benchmark (UJ) that gained 3.85. Both sections attain nearly the same benchmark.

The target benchmark should increase to 4.0. in the next year which may be rendered to the continuous improvement of the teaching strategies, topics and facilities.

A questionnaire is applied and analyzed on a scale from one to five.

This internal benchmark was chosen because it describes the achievement of the previous year.

Last academic year was taken as internal benchmark

University of Jeddah was taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strengths

- Relevant surveys are conducted regularly which allows for consistent evaluation of the overall learning experience from final year students' perspective.

Cause: The reasons that led to the failure to achieve the target performance indicator are lack of active learning from the students that implies more efforts from the staff to attain active cooperation

Result: More effort should be exerted for developing laboratories and libraries.

The program graduates need more training and improvements of their qualifications and skills

Recommendations



- Academic advisors during the orientation sessions should discussed the key points with the students in order to improve the overall quality of their learning experiences

Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-02	Academic advisors during the orientation sessions should discussed the key points with the students in order to improve the overall quality of their learning experiences	holding seminars and sessions to improve the overall quality of their learning experiences	Quality and Academic accreditation committee	Program coordinator	1-9-2020	15-4-2021



KPI-P-03 : Students' evaluation of the quality of the courses.
KPI- P-03 for Chemistry Program in College of Science, Sakaka

Program

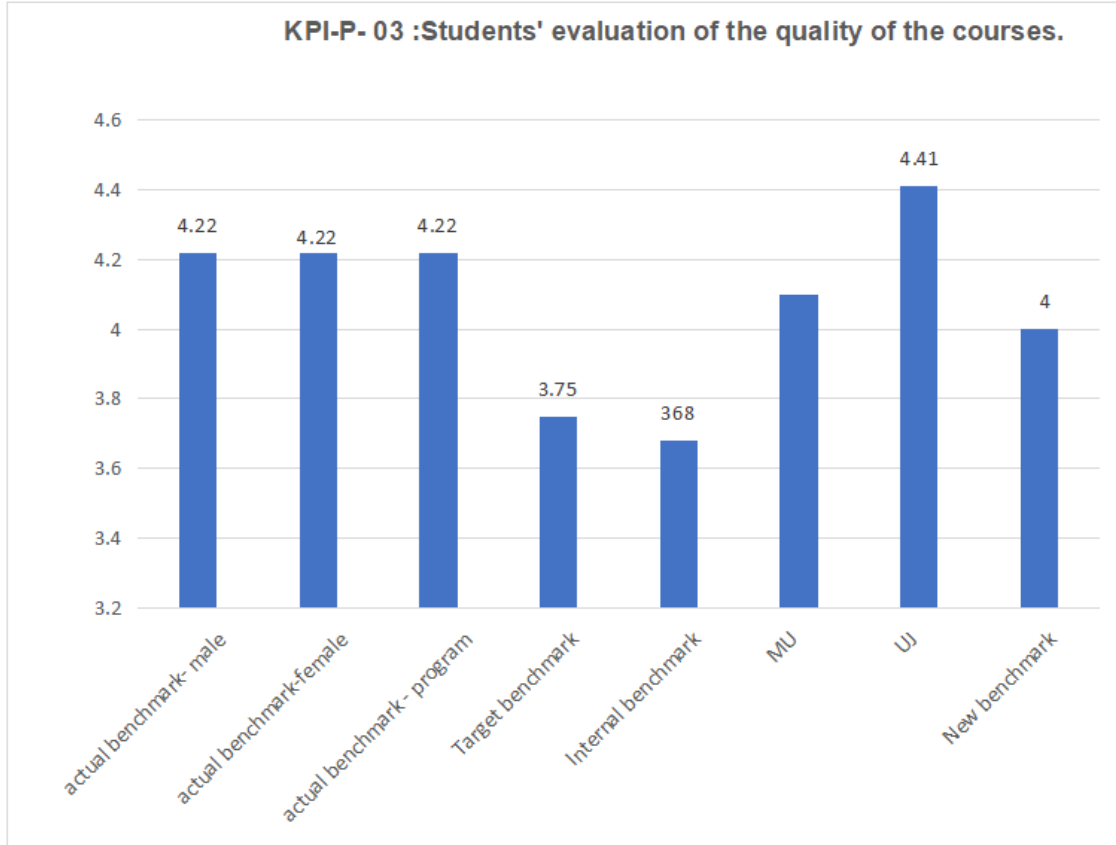
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
4.22	3.75	3.68	MU	UJ	4.0
			4.1	4.41	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
4.22	3.75	3.68	MU	UJ	4.0
			4.1	4.41	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
4.22	3.75	3.68	MU	UJ	4.0
			4.1	4.41	



The Measurement: Application of a student assessment questionnaire for the quality of courses on a five-level scale in a survey annual .

-Student evaluation of the quality of courses in the program= 4.22

Analysis

An actual benchmark indicator of 4.22 was accomplished which is relatively higher than that of the internal benchmark indicator and the external benchmark, MU) but still less than that of (UJ) and exceeds that of the internal benchmark. The actual benchmark indicator should be increased which may be rendered to the continuous improvement of the teaching strategies, topics and facilities.

A questionnaire is applied and analyzed on a scale from one to five.

Last academic year was taken as internal benchmark

Majmaah University and University of Jeddah were taken as external benchmark

Majmaah University and University of Jeddah were taken as external benchmark



Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause: The reasons that led to the failure to achieve the target performance indicator are lack of active learning from the students that implies more efforts from the staff to attain active cooperation

Result: More effort should be exerted for developing laboratories and libraries.

The program graduates need more training and improvements of their qualifications and skills

Recommendations:

- 1- The content of the courses should be updated

Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-03	-The content of the courses should be updated	Update the courses references	courses coordinators	Quality coordinator	1-9-2020	15-4-2021



KPI-P-04: Completion rate

KPI- P-04 for **Chemistry** Program in College of **Science, Sakaka** Program

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
44.64%	40%	33.3%	MU	UJ	45%
			————	58.05 %	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
23%	35%	26%	MU	UJ	35%
			————	58.05 %	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
51.16%	45%	40.6%	MU	UJ	55%
			————	58.05 %	

KPI-P- 04 :Completion rate.

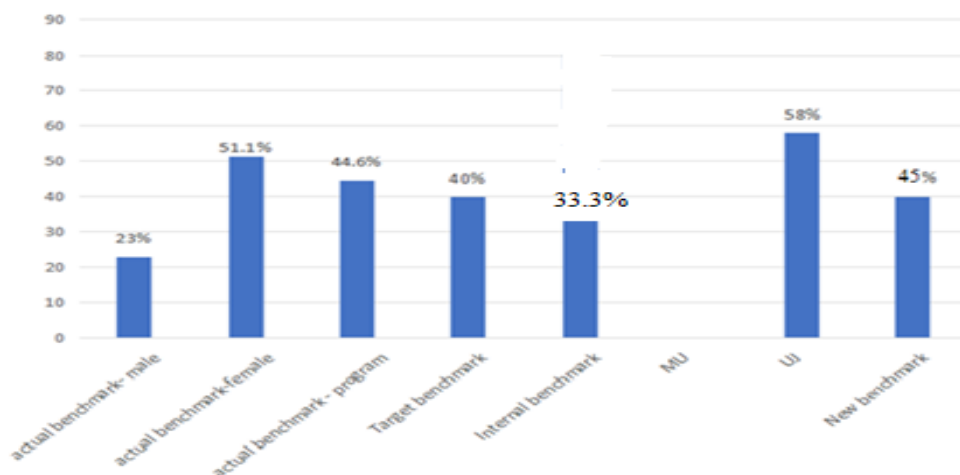


Figure 4: The completion rate in the Chemistry program.

Measurement way: Percentage of the completion rate in the Program



The number of undergraduate students who completed the program within the prescribed period of the program from each batch : The total number of students enrolled in the program in each batch:

Completion rate =

$$\frac{\text{The number of undergraduate students who completed the program within the prescribed period}}{\text{The total number of students enrolled in the program in each batch}} \times 100$$

Analysis

An actual benchmark indicator of 44.64% was accomplished which is relatively higher than that of the internal benchmark indicator (33.3%) and also less than the external benchmark (UJ, 58%) and this may due to corona pandemic. The actual benchmark for female section is more than that of male section.

The completion rate is calculated as percentage.

Last academic year was taken as internal benchmark

The Jeddah University was taken as External Bench mark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause:

The reasons that led to the failure to achieve the target performance indicator: increased enrollment among students from lower in the precollegiate test score distribution



Result: Increased interest in students who are struggling through the affirmative, by emphasizing the basic principles of specialization.

Recommendations:

- 1) Making committees to follow up the performance.
- 2) Increased interest in students and students who are struggling through the affirmative, by emphasizing the basic principles of specialization.

Proposal Action plan

N0. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI- P-04	1-Making committees to follow up the performance 2- Increased interest in students and students who are struggling through the affirmative, by emphasizing the basic principles of specialization.	Holding seminars to discuss the problems suffering the students to help them	Academic advisor committee	Program coordinator	1-9-2020	15-4-2021



KPI-P-05: First-year students retention rate

KPI- P-05 for **Chemistry** Program in College of **Science**

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
84.17%	80%	98.4%	40 %	100 %	85%

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
64.58 %	80%	100%	40 %	100 %	85%

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
97.72 %	80%	98%	40 %	100 %	85%

Measurement way: Percentage of *the first-year student's retention rate in the chemistry program*

The Number of first-year students who continue in the program for the following year :

The total number of first year students in the same year

Retention rate=

$$\frac{\text{The Number of first-year students who continue in the program for the following year} \times 100}{\text{The total number of first year students in the same year}}$$

Student's retention rate = 84.17 %

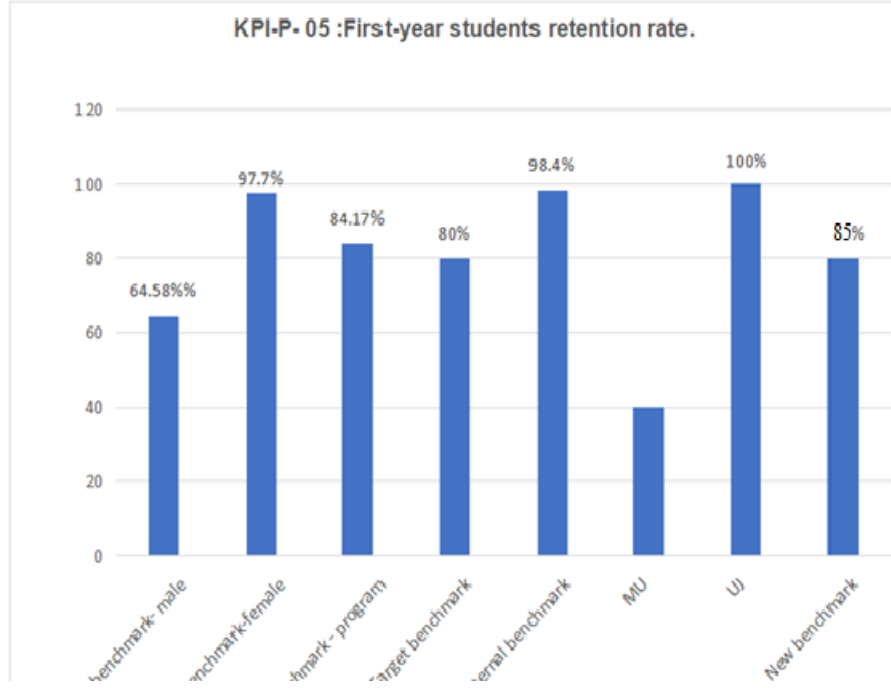


Figure 5: The first-year students retention rate in the Chemistry program.
Analysis

The results show that the number of student who entering the program and successfully complete first year is 84.17 % that is less than the previous year and the external benchmark of UJ but higher than JU. The actual bench mark of female section is more than that of male section.

The retention rate is calculated as percentage.

Last academic year was taken as internal benchmark.

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.



Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause: The first-year students retention rate completion rate does not reach reached the target benchmark.

Result: Increasing interest in the practical side through laboratories and the other services provided.

Recommendations:

1)The need for continuous evaluation to encourage students to work hard and activate the role of academic advisor.

Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-05	The need for continuous evaluation to encourage students to work hard and activate the role of academic advisor.	Verifications of students achievements in each program should be send to an audit outside university in order to gain more special feedbacks	Academic Advising Committee	Program coordinator	1-9-2020	15-4-2021



KPI-P-6: Students' performance in the professional and/or national examinations.

KPI- P-06 for **Chemistry** Program in College of **Science**

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
39.18 %	30%	10%	MU	UJ	40%
			-----	----	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
40%	30%	10%	MU	UJ	40%
			-----	----	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
38.37%	30%	10%	MU	UJ	40%
			-----	-----	

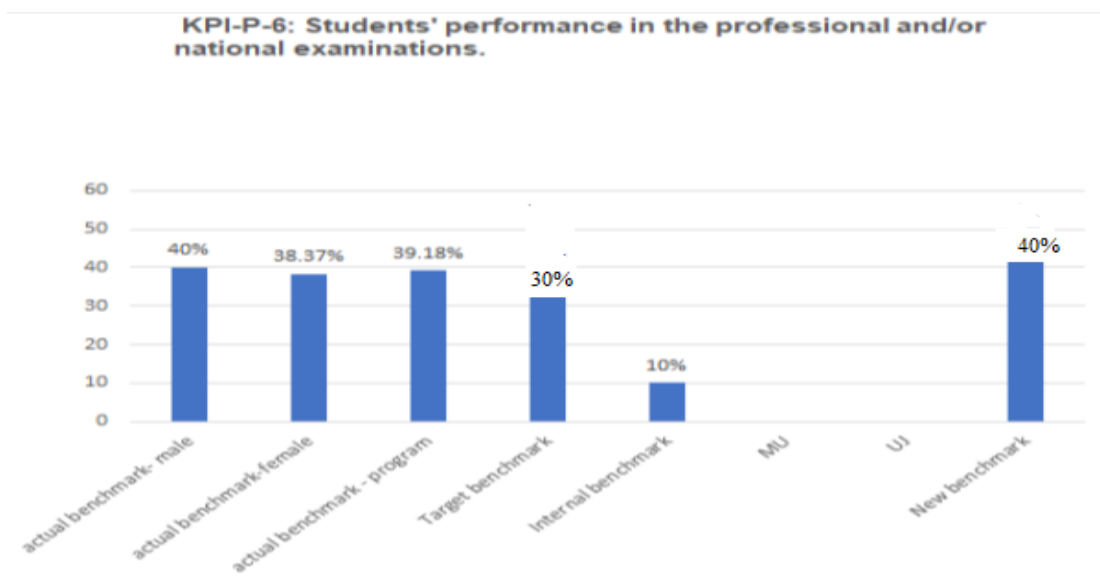


Figure 6: The Students' performance in the professional and/or national examinations for the Chemistry program.

Measurement way



The Students' Percentage who pass professional and or national exams=

The number of students or graduates who pass professional *and/or* national exams
The total number of graduates who perform professional or national exams

× 100

Analysis

The results show that the number of student who entering the program and successfully complete first year is 39.18 % that is higher than the last year (10%) and the target benchmark (30%), The value is very low that implies continuous monitoring for this issue.

Last academic year was taken as internal benchmark.

External benchmark was not available

Strength: There is an increasing in the value of the benchmark

Cause: Due to more training courses that helps to raise the opportunities for our graduated students.

Result: Support the graduated student with some specialized high-level training courses that helps to raise the employment opportunities for our graduated students

Recommendations

The need for continuous evaluation to encourage students to work hard and activate the role of academic advisor

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-06	- The need for continuous evaluation to encourage students to work hard and activate	Verifications of students achievements in each program should be	Academic Advising Committee	Program coordinator	1-9-2020	15-4-2021



	the role of academic advisor	send to an audit outside university in order to gain more special feedbacks				
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KPI-P-7: Graduates' employability and enrolment in postgraduate programs.

KPI- P-07 for **Chemistry** Program in College of **Science**

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
52.9%	60%	55%	MU	UJ	60%
0	3%	0	——	60 %	3%

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
75%	80%	70%	MU	UJ	80%
0	3%	0	——	60 %	3%

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
30.8 %	40%	40%	MU	UJ	40%
0	3%	0	——	60 %	3%

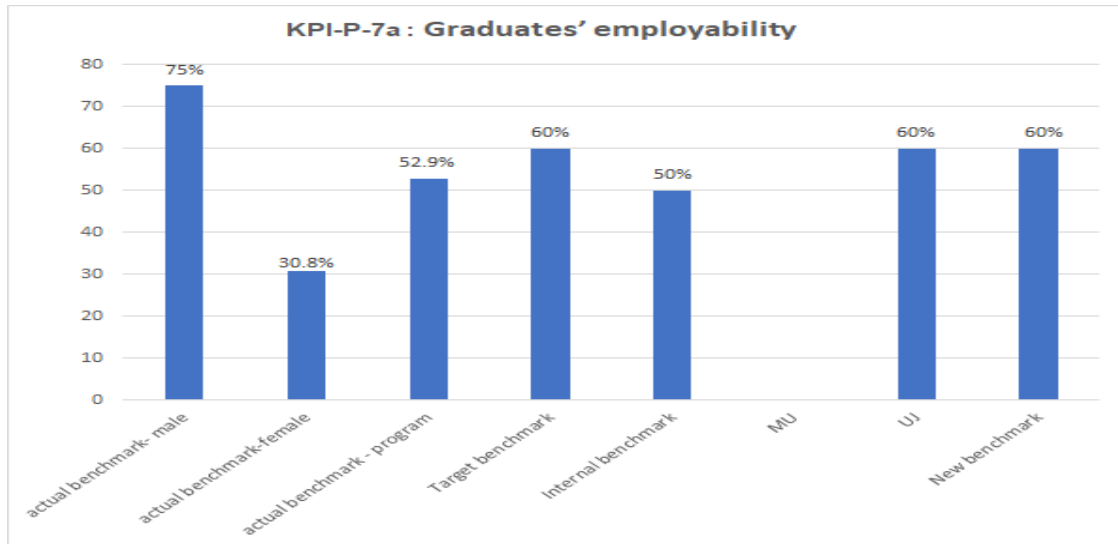


Figure 12a: The employability of graduates of the Chemistry program at the Main campus level:

Measurement way: Percentage of employing graduates and enrolling them in postgraduate programs

Graduate employability =

$$\frac{\text{The number of program graduates who were employed in the first year of their graduation} \times 100}{\text{The total number of program graduates in the same year}}$$

Analysis

The results show that the number of who Graduates' employability is 52.9% that higher than the previous year but less than the external benchmark (UJ) that reached 60% , The target benchmark indicator should be increased to reach 60% .

The results show the proportion of graduates from undergraduate programs who are employed is adequate. More efforts has to be done by the graduation unit to collect data about employment.

This internal benchmark was chosen because it describes the achievement of the previous year.

Last academic year was taken as internal benchmark



University of Jeddah was taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Enrollment of graduates of the program to postgraduate studies =

$$\frac{\text{The number of graduates who joined postgraduate studies during the first year of their graduation}}{\text{The total number of program graduates in the same year}} \times 100$$

Secondly, the enrollment percentage is weak and can be improved by This can done with the registration of MSc. Program in Jouf university.

Cause:

The Corona virus is still affect on the the employment process

Result: More data about employment agencies is required for program graduates, as well as a more effective mechanism for communicating with the graduate.

Recommendations:

-More data about employment agencies is required for program graduates, as well as a more effective mechanism for communicating with the graduate.

- Invite more companies and businessmen in the employment forum



Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-07	Establishing fair job -More data about employment agencies is required for program graduates, as well as a more effective mechanism for communicating with the graduate. - Invite more companies and businessmen in the employment forum	Work to set up partnerships with the business sector. -Work to organize various events such as Career Day (career absolvent) so that our students explore	Alumni Affairs Committee	Program coordinator	1-9-2020	15-4-2021



KPI-P-8: Average number of students in the class.

KPI- P-08 for Chemistry Program in College of Science, Sakaka Program.

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
15	11	18	————	10	11

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
7	5	10	————	10	5

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
23	17	26	————	10	17

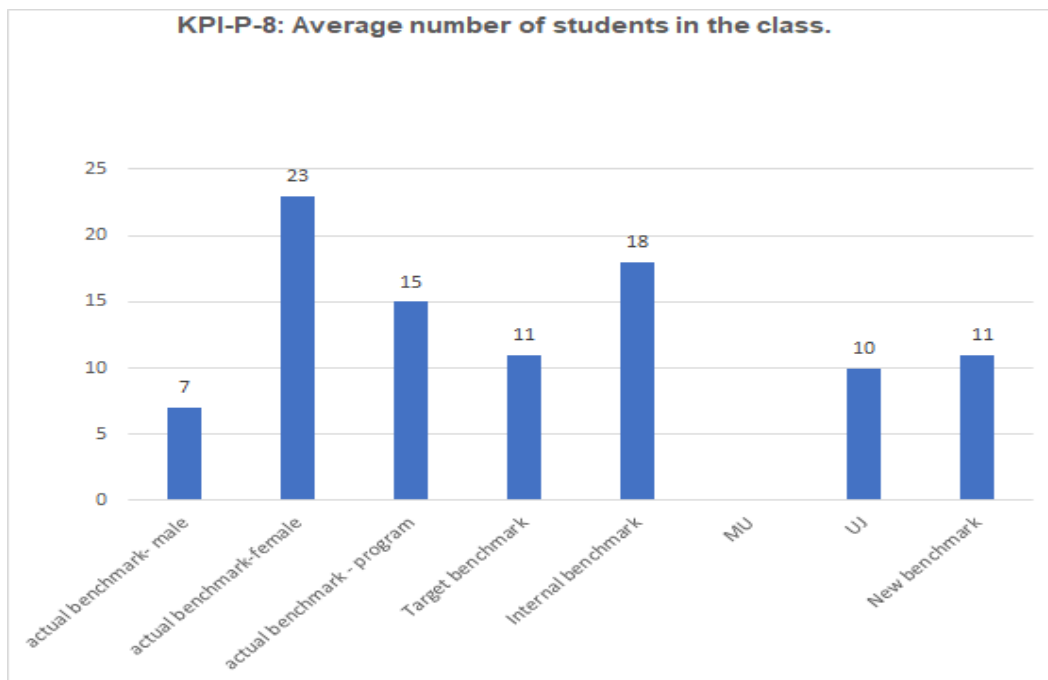


Figure 8: The average number of students in the class in the Chemistry program.



Measurement way: *Average number of students in the class*

$$\text{Average number of students per class} = \frac{\text{The total number of students}}{\text{The total number of class}}$$

Analysis

The results show that the average number of students in the classes and laboratories is 15.0 that relatively lower than the previous year but higher than the external benchmark (UJ) that reached 10.0 . Generally, the value reached is adequate.

More efforts has to be done by the institute to lower the number of students entering the chemistry program and/ or increase the number of classrooms and laboratories specially in female section.

This internal benchmark was chosen because it describes the achievement of the previous year.

Last academic year was taken as internal benchmark

University of Jeddah was taken as external benchmark

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strength: The actual benchmark is more than the previous year

Cause: Good orientation in the class rooms and laboratories.

Result: need more staff especially in the female section.

Recommendations:



More efforts has to be done by the institute to increase the number of classrooms and laboratories specially in female section

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-8	More efforts has to be done by the institute to lower the number of students entering the chemistry program and/ or increase the number of classrooms and laboratories specially in female section	- increasing the number of classrooms and laboratories specially in female section	Student Affairs Committee	Program coordinator	1-9-2020	15-4-2021

KPI-P-9: Employers' evaluation of the program graduates proficiency.

KPI- P-09 for **Chemistry** Program in College of **Science** –

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
4.07	3.75	3.61	----	---	4.0

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.95	3.75	3.61	----	----	4.0

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
4.2					4.0

	3.75	3.61	---	---	
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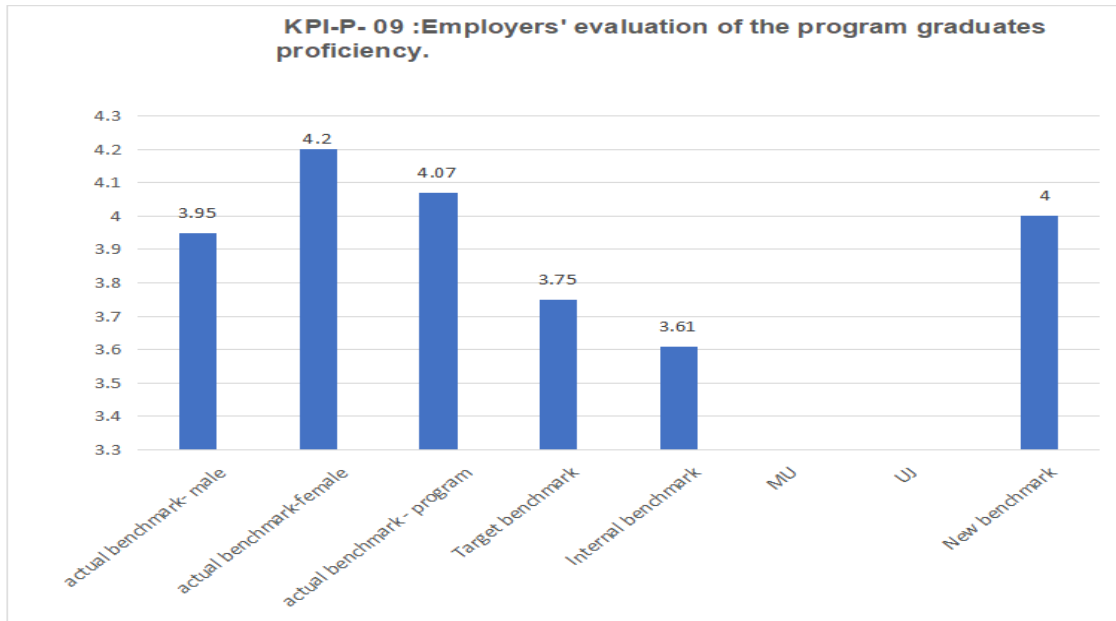


Figure 9: The employers' evaluation of the Chemistry program graduates proficiency at the Main campus level.

Measurement way: Applying a questionnaire to evaluate the employers' efficiency of the program's graduates on a scale from five levels in an annual survey.

The employers' evaluation of the chemistry program graduates proficiency = 4.07

Analysis :

The results show that the Employers' evaluation of the program graduates proficiency is 4.07 of 5.0 that relatively higher than the previous year (3.61) and also thae target (3.75), while no data were given by the two external benchmark (MU, UJ), that reflects satisfaction of the employers towards the program graduates.

Last academic year was taken as internal benchmark.

A questionnaire is applied and analyzed on a scale from one to five.



This internal benchmark was chosen because it describes the achievement of the previous year.

Cause

The reasons that led to the failure to achieve the target performance indicator are: The graduate of the program needs more to face all of the labor requirements.

Result Increase the number of meetings with students, even those who did not graduate to encourage them Communication with school owners and factories in the fields of graduate work and more training and improvements of the qualifications and skills of graduate

Strengths

- Employers' evaluation are conducted regularly which allows for consistent evaluation from chemistry graduates' perspective.

Recommendations

- Increase the number of participants from employers in the evaluation process for graduates of the program to identify deficiencies in the educational process.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-09	1-More efforts by the staff and institute to maintain this trust of the Employers' towards the graduates. 2-Form a committee from the unit to follow the graduates in their	Holding meeting with the employers	Program coordinator	Department council	1-9-2020	15-4-2021



jobs and find out the extent the institution's satisfaction with the graduate level					
-------------------------------------------------------------------------------------------------	--	--	--	--	--

KPI-P-10: Students' satisfaction with the offered services.

KPI- P-10 for Chemistry Program in College of Science –

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.55	3.5	3.1	MU	UJ	3.5
			3.91	————	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.4	3.5	3.1	MU	UJ	3.5
			3.91	————	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.7	3.5	3.1	MU	UJ	3.5
			3.91	————	

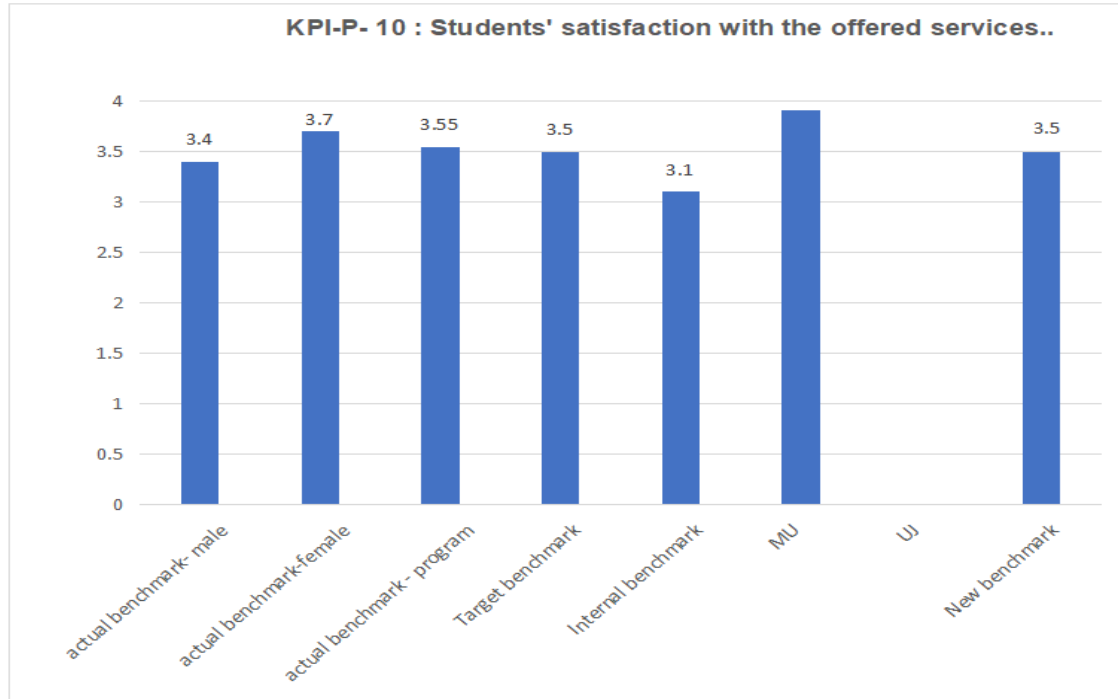


Figure 10: The Students' satisfaction with the offered services in the Chemistry program.

Measurement way: Applying a questionnaire to evaluate the Students' satisfaction with the offered services in the program on a scale from five levels in an annual survey

Student satisfaction with the services provided = 3.55

Analysis

The results show that the Students' satisfaction with the offered services is 3.55 of 5.0 that relatively higher than the previous year but still less than the external benchmark (MU) that reached 3.9.

A questionnaire is applied and analyzed on a scale from one to five.

Last academic year was taken as internal benchmark.

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.



Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause: The qualities of service ,that help the student, have to be improved

Result:

Continuous improve to medical services, and nutrition services should be applied

Recommendations

- An appropriate strategy needs to be developed through focused group discussions with all the relevant stakeholders to improve the quality of facilities and equipment available to the program.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-10	An appropriate strategy needs to be developed through focused group discussions with all the relevant stakeholders to improve the quality of facilities and	Internal audit for the facilities and services.	Internal audit commitee	Quality Coordi-nator	1-9-2020	15-4-2021



equipment available to the program.						
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KPI-P-11: Ratio of students to teaching staff.

KPI- P-11 for **Chemistry** Program in College of **Science** – Program

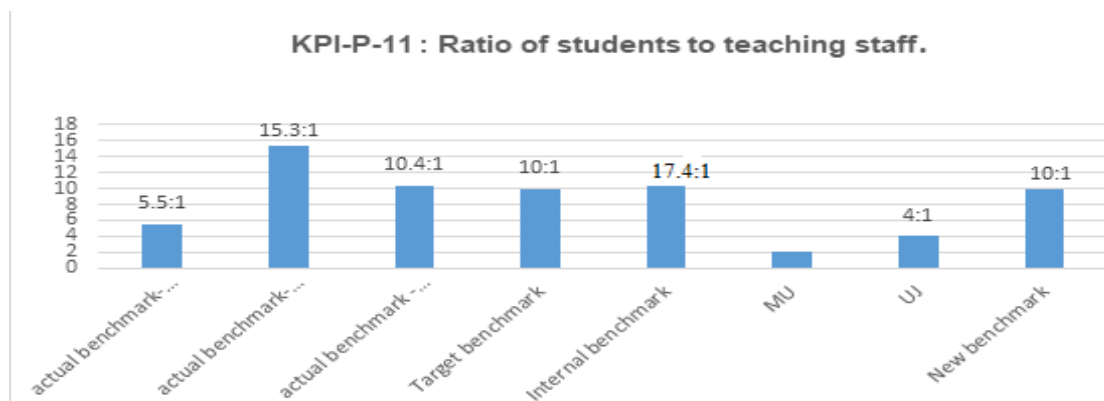
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
10.4:1	10:1	17.4	2 : 1	4 : 1	10:1

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
5.5:1	5:1		2 : 1	4 : 1	5:1

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
15.3	15:1		2 : 1	4 : 1	15:1



Measurement way: The ratio of students to teaching staff in the chemistry program



Ratio of students to teaching staff in the program=

$$\frac{\text{The total number of students of the program}}{\text{Total number of full-time faculty members}}$$

Analysis

The results show that the ratio of students to teaching staff is 10.4:1 that less than the previous year (17.4:1) but higher than the two external benchmark (MU) that may be rendered to the decreased number of teaching staff in both sections (Boys & Girls).

This ratio is calculated as total number of staff members to the total number of students

This internal benchmark was chosen because it describes the achievement of the previous year.

- Last academic year was taken as internal benchmark
- UJ and MU taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strength:

- The program provides sufficient number of full-time teaching staff to the students.
- **Cause:** Sufficiency of qualified cadres in the male section are available.
- **Result:** Sufficiency of qualified cadres with high scientific experience in the field of teaching and scientific research especially in the female section are needed.

Recommendations:



- 1-Organizing visits to secondary schools and introducing students to the program and the scientific horizons that can be achieved in their educational and practical journey.
- There is a need to increase the proportion of Associate and Full Professors in the female section.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPP-P-11	1-Organizing visits to secondary schools and introducing students to the program and the scientific horizons that can be achieved in their educational and practical journey.	Holding seminars and workshop with sec. school students	Program Coordinator	Department committee	1-9-2020	15-4-2021
	2-There is a need to increase the proportion of Associate and Full Professors in the female section.	recruit more Assoc. Prof. and full Prof.	Faculty Contracting Committee	Department committee	1-9-2020	15-4-2021



KPI-P-12: Percentage of teaching staff distribution.

KPI- P-12 for **Chemistry** Program in College of **Science, Sakaka** Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
M. 67.25 % F. 32.75 % Assist. P: 64.62 % Assoc. P: 16.37% Prof.: 19.01 %	M. 67.25 % F. 32.75 % Assist. P:40 % Assoc. P:40 % Prof.: 20 %	A: M. 67.25 % F. 32.75 % Assist. P: 64.62 % Assoc. P: 16.37 Prof. 19.01	Lecturer: 21 % Assist. P: 72 % Assoc. P: 7 % Prof.: 0 %	Lecturer: 4.1 % Assist. P: 57 % Assoc. P: 23.6 % Prof.: 15.3 %	M. 67.25 % F. 32.75 % Assist. P:40 % Assoc. P:40 % Prof.: 20 %

Measurement way: The Percentage of teaching staff distribution in the chemistry program

1- Percentage distribution of faculty members by sex

Percentage of faculty members, female part =

$$\frac{\text{Total Number of teaching staf,Female Section}}{\text{The total number of teaching staff in the program}} \times 100$$

$$\text{Percentage of faculty members, male part} = \frac{\text{Total Number of teaching staf F,male Section}}{\text{The total number of teaching staff in the program}} \times 100$$

2- Percentage distribution of the total number of faculty members in each branch =

$$\frac{\text{the total number of teaching staff in each branch}}{\text{the total number of teaching staff in the program}} \times 100$$

3- Percentage of the distribution of teaching staff in terms of scientific rank =



$$\frac{\text{Number of teaching staff in each scientific rank}}{\text{the total number of teaching staff in the program}} \times 100$$

Analysis:

The actual no. of Prof. is higher than the external benchmark (UJ and MU) while the no. of Associate Prof. is less than that in UJ, the no. of Assistant Prof. is less than that in MU. Many assistant professors should be encouraged to be associate professors especially in female section.

-This internal benchmark was chosen because it describes the achievement of the previous year.

-Last academic year was taken as internal benchmark

- UJ and MU taken as external benchmark

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

(i) Comparability of Infrastructural facilities required for the programs across KSA

(ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strengths: Increasing in the no. of Associate Prof. and Full Prof.

Cause: Sufficiency of qualified cadres in the male section are available.

Recommendations



Some Associated professors should also be promoted to be professors especially in male section to get balanced pyramid for the ranks of the staff members. It is also advised to recruit associate professors in female sections when new recruitment is considered.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-12	It is also advised to recruit associate professors in female sections when new recruitment is considered.	recruit more Assoc. Prof. and full Prof	Faculty Contracting Committee	Faculty Contracting Committee	1-9-2020	15-4-2021



KPI-P-13: Proportion of teaching staff leaving the program.

KPI- P-13 for **Chemistry** Program in College of **Science**

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
3.3 %	0%	0 %	MU	UJ	0%
			0 %	0 %	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
0 %	0%	0%	MU	UJ	0%
			0 %	0 %	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
6.6 %	0%	0%	MU	UJ	0%

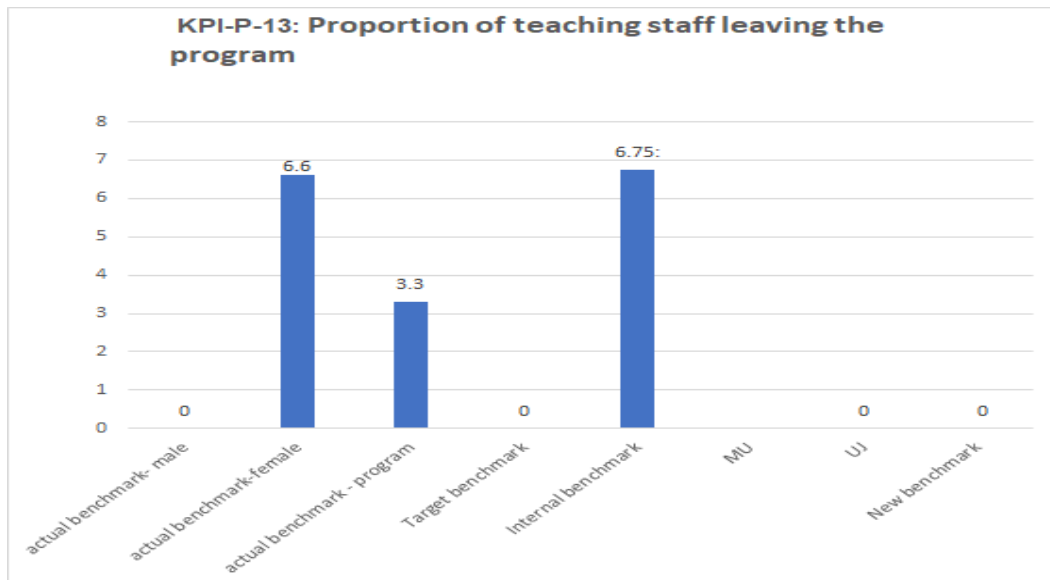


Fig. 13

Measurement way: The Percentage Number of faculty members who leave the program for reasons other than retirement age.



Percentage of Faculty dropout from the program=

$$\frac{\text{number of Faculty dropout from the program}}{\text{the total number of teaching staff in the program}} \times 100$$

Analysis:

The actual benchmark is 6.33% that is less than those left the program in 39-40 (6.75%) and also less than the external benchmark (MU, 20%).

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strengths

- There is a high degree of job satisfaction at the department, leading to higher retention rates.

Cause: Increasing the stability of the faculty members of the program

Result: Decrease student teaching staff ratio.

Recommendations

- It is recommended to improve the conditions of faculty members (financially and administratively) and to work to attract distinguished talent staff.



Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-13	Improve the conditions of faculty members (financially and administratively) and to work to attract distinguished talent staff.	Increasing the stability of the faculty members of the program	Training and development committee	Program coordinator	1-9-2020	15-4-2021

KPI- P-14 Percentage of publications of faculty members.

KPI- P-14 for Chemistry Program in College of Science –

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
83%	80%	51.5%	75 %	88.85 %	85%

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
86%	80%	51.5%	75 %	88.85 %	85%

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
80%	80%	51.5%	75 %	88.85 %	85%

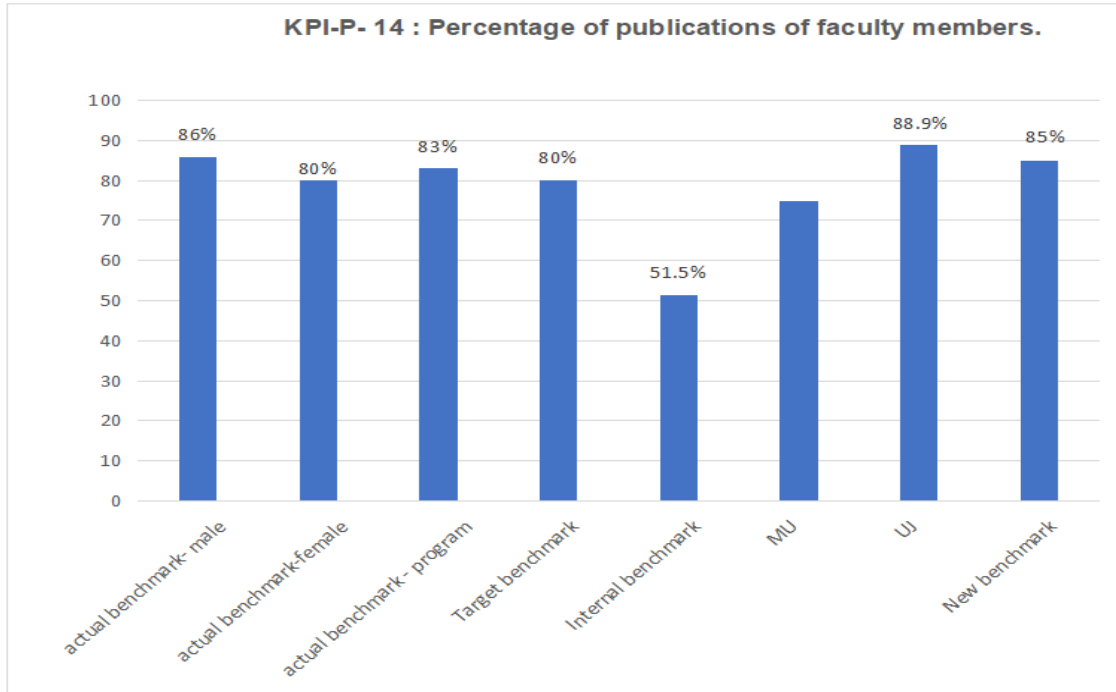


Figure 12: The percentage of publications of faculty members in the Chemistry program.

Measurement way: The Percentage of publications of faculty members in the chemistry program.

Percentage of scientific publication for faculty members =

$$\frac{\text{Number of full-time faculty members who published at least one research during the year}}{\text{the total number of teaching staff in the program}} \times 100$$

Analysis:

The actual benchmark is 83% higher than the previous year (51.5%) and (MU) but still less than the external benchmark (UJ, 89%) and also exceeds the target benchmark -The benchmark is calculated as number of staff members published at least an article this year to the total number of staff. The actual benchmark in male section is higher than that in female section.

-Last academic year was taken as internal benchmark.



-This internal benchmark was chosen because it describes the achievement of the previous year.

Majmaah University and University of Jeddah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Strengths:

- Most of the counted papers (all refereed) were published in ISI indexed journals.

Cause: The actual bench mark rises 50% over the previous year target

Result: Continuous financial support needs.

Recommendations:

Improvement of research facilities and the increment of number of financed projects may enhance the value of this indicator.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-14	Improvement of research facilities and the increment of number of financed projects	Involve the faculty member in group research	Scientific Research Committee	Program Administration	1-9-2020	15-4-2021



KPI-P-15: Rate of published research per faculty member.

KPI- P-15 for Chemistry Program in College of Science, Sakaka Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
1.59:1	2:1	1.12:1	MU	UJ	2:1
			2:1	1.83:1	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
1.99:1	2:1	1.12:1	MU	UJ	2:1
			2:1	1.83:1	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
1.2:1	2:1	1.12:1	MU	UJ	2:1
			2:1	1.83:1	

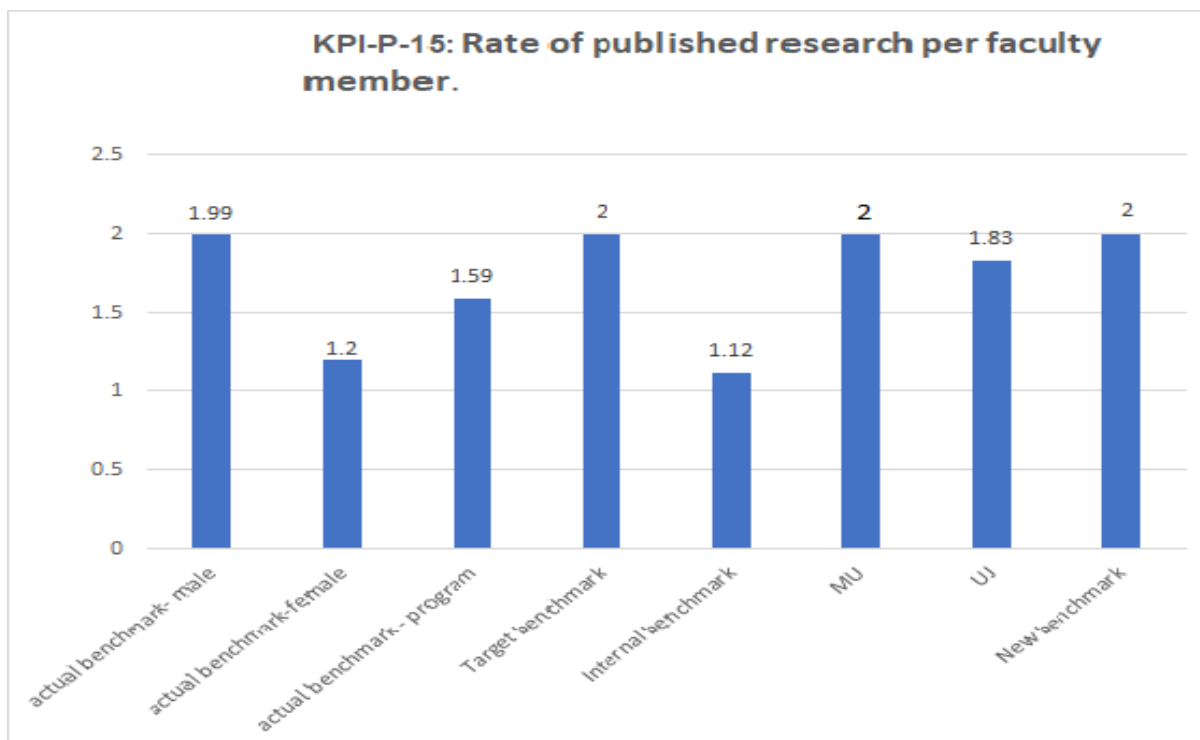




Figure 13: The rate of published research per faculty member in the Chemistry program.

Measurement way: *The rate of published research per faculty member in the*

$$\text{chemistry program} = \frac{\text{The total number of research published during the year}}{\text{The total number of teaching staff in the program}}$$

Analysis :

Results show increasing in the number of refereed publications in international impacted journals per full time equivalent teaching staff in the academic year 40/41 compared to 39/40 but less than the two external benchmark (MU and UJ). The actual benchmark (1.59:1) is less than the target (2:1).

This ratio is calculated as number of all published articles this year to the total number of staff.

Last academic year was taken as internal benchmark.

This internal benchmark was chosen because it describes the achievement of the previous year.

University of Jeddah and Majmaah were taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

- (i) Comparability of Infrastructural facilities required for the programs across KSA
- (ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause: the publication in female section need to increase

Result: The research supporting financial needs extra supports.

Recommendations:



The ratio is aimed to be increased in the next year through increasing the number of research projects financed by the University.

Proposal Action plan

No. of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-15	Increasing the number of research projects financed by the University.	Involve the faculty member in group research	Scientific Research Committee	Program Administration	1-9-2020	15-4-2021

KPI- P-16: Citations rate in refereed journals per faculty member.

KPI- P-16 for Chemistry Program in College of Science -

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
45.4:1	40:1	36:1	MU	UJ	50:1
			—	9.05	

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
75.6:1	50:1	62:1	MU	UJ	70:1
			—	9.05	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
15.2:1	30:1	10:1	MU	UJ	30:1
			—	9.05	

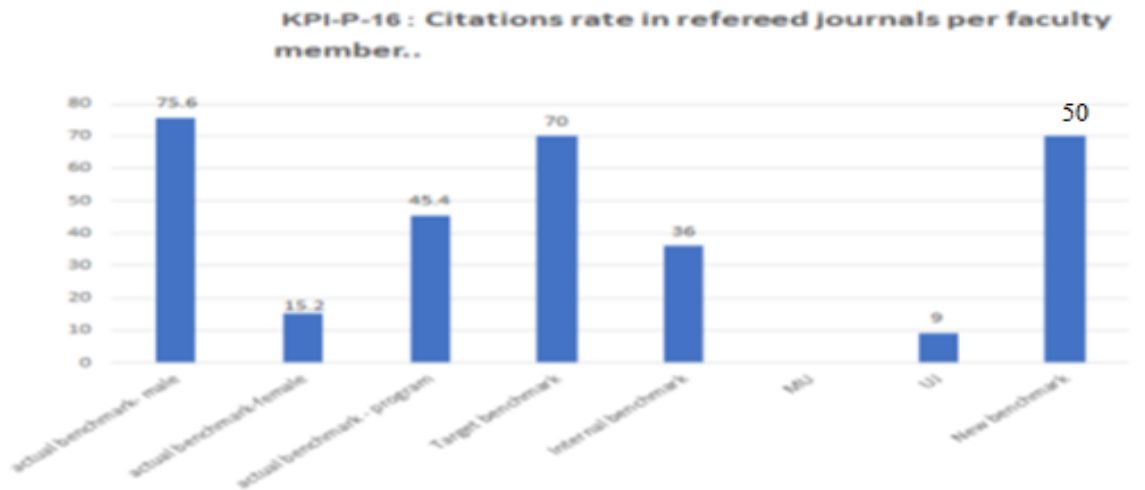


Figure 14: The Citations rate in refereed journals per faculty member in the Chemistry program.

Measurement way: The Citations rate in refereed journals per faculty member=

$$\frac{\text{The total number of citations in refereed journals from scientific research published by faculty members}}{\text{The total number of scientific research published for faculty members}}$$

Analysis

Results show that the number of citations in refereed journals per full time equivalent faculty members in the academic year 40/41 increase relative to 38/39. This may be due to the increase in the number of publication and improvement of the research experimental facilities. However, this number is aimed to be increased with the increased number of publications in the next year.

Furthermore, the actual KPI No. is not reached to the target one, therefore the latter is taken to be the new benchmark.

Last academic year was taken as internal benchmark. This internal benchmark was chosen because it describes the achievement of the previous year.



University of Jeddah was taken as external benchmark

Why this external provider was chosen.

Keeping in view of good practice, two specific criteria has been fixed to choose the external benchmarking partner viz

(i) Comparability of Infrastructural facilities required for the programs across KSA

(ii) Availability of data as required by the NCAAA.

Accordingly, MU and UJ were chosen as benchmarking partner keeping in view of Comparability. Moreover, it also attained institutional accreditation as like Jouf University.

Cause: The program should encourage and enhance the publication in ISI database To improve the citation ratio.

Result: continuous encouragement and enhanced the publication in ISI database

Recommendation:

Opening channels of communication between the program and other programs in the scientific research to improve their publications in high impacted journals.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-16	Opening channels of communication between the program and other programs in the scientific research to improve their	Involve the faculty member in group research	Scientific Research Committee	Program Administration	1-9-2020	15-4-2021

	publications in high impacted journals					
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KPI-P-17: Satisfaction of beneficiaries with the learning resources.

KPI- P-17 for **Chemistry** Program in College of **Science** –

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.35	3.5	3.5	MU	UJ	3.5
			3.18	3.23	

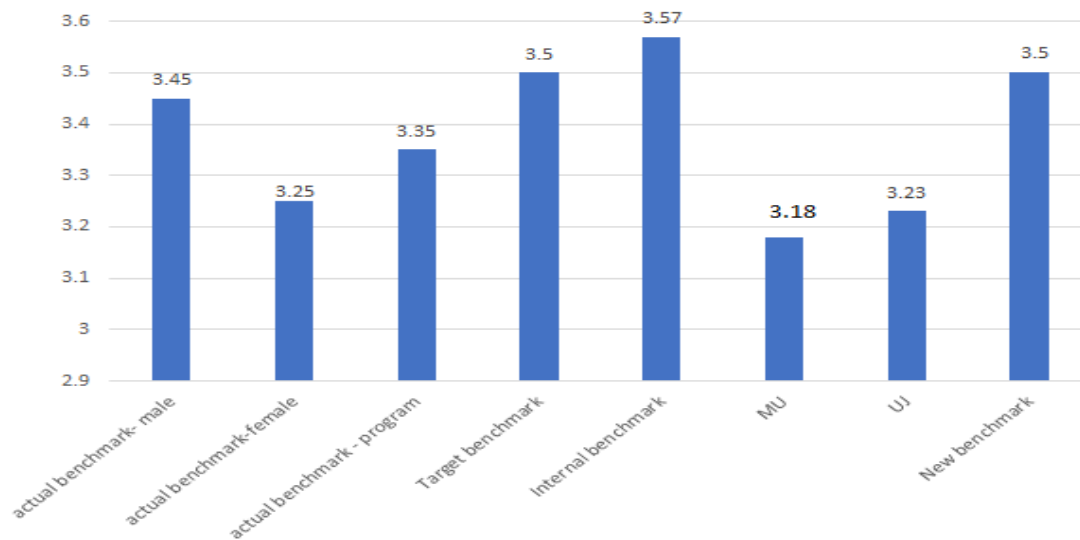
(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.45	3.5	3.5	MU	UJ	3.5
			3.18	3.23	

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**		New Target Benchmark
			MU	UJ	
3.25	3.5	3.5	MU	UJ	3.5
			3.18	3.23	

KPI-P-17: Satisfaction of beneficiaries with the learning resources





Measurement way: Average rating of beneficiaries' satisfaction with learning resources.

The application of a questionnaire to evaluate beneficiaries' satisfaction with learning resources on a scale from five levels in an annual survey.

The satisfaction of beneficiaries with the learning resources in the chemistry program = 3.35

Analysis

The results show a lower rate of adequacy of the Stakeholder evaluation of the learning resources in the academic year 40/41 (3.35) compared to 39/40 (3.75). That implies a continuous improvement in the provided services and increasing the accessible database/content. Furthermore it is more than the value of the two external benchmark MU (3.18) and UJ (3.23).

Furthermore, the actual KPI No. is not reached to the target one, therefore the latter is taken to be the new benchmark.

The benchmark calculated by a questionnaire is applied and analyzed on a scale from one to five.

Cause: The reasons that led to the failure to achieve the target performance indicator are lack of active learning from the students that implies more efforts from the staff to attain active cooperation

Result: More effort should be exerted for developing laboratories and libraries.

The program graduates need more training and improvements of their qualifications and skills

Recommendations

- An appropriate strategy needs to be developed through focused group discussions with all the relevant stakeholders to improve the quality of learning resources.



Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-P-17	Developed through focused group discussions with all the relevant stakeholders to improve the quality of learning resources.	Help and demonstrate students how to use the digital library	Staff members	Program Administration	1-9-2020	15-4-2021

KPI-AP-01: No. of research groups in the program.

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
0	2	0	Not available	2

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
0	1	0	Not available	1

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
0	1	0	- Not available	1

Measurement way:

The number of research groups projects received by faculty members in the program annually

The number of research groups: 0



Analysis:

No research group was given in this year

-The source to collect the data was from the Deanship of Scientific Research who

maintains the year wise data, hence it was considered

-Last academic year was taken as internal benchmark.

-The external benchmark is not available.

Recommendation

- Increasing financial support for research projects to match the costs of chemicals and characterization
- **Proposal Action plan**

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-AP-01	Increasing financial support for research projects to match the costs of chemicals and characterization	Involve the faculty member in group research	Scientific Research Committee	Program Administration	1-9-2020	30-5-2020



KPI-AP-02: No. of subsidized research projects that you receive from program staff annually

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
14	15	13	Not available	15

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
12	13	11	Not available	13

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
2	2	2	Not available	2

KPI-AP-02. The number of funded research projects that the program's employees obtain annually .

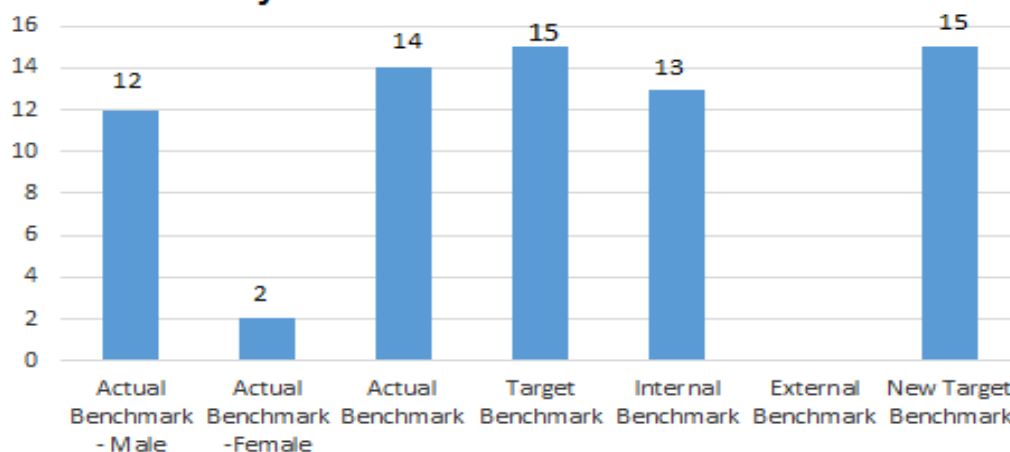


Figure 16: The number of funded research projects that the number of funded research projects program's employees obtain annually in the Chemistry program

Measurement way: Number of research projects supported annually



Number of research projects supported annually in the program for female part: 2

Number of research projects supported annually in the program for male part: 12

Total Number of research projects supported annually: 14

Analysis:

Figure 16: The results show a higher rate of the number of funded research projects program's employees obtain annually in the academic year 1440-141 compared to 1399-1440. That implies a continuous improvement in the provided funds. It is clear that the male section got almost triple than that of male section.

-The source to collect the data was from the Deanship of Scientific Research who maintains the year wise data , hence it was considered

-Furthermore, the actual KPI No. is not reached to the target one, therefore the latter is taken to be the new benchmark.

Strengths:

The number of funded research projects program's employees obtain annually in the Chemistry program , is more than that of the internal benchmark

Cause: The increment in the value of this KPI can be attributed to the financial support for research projects provided by the Deanship of Scientific Research

Result: A continuous Increasing financial support should be provided the deanship

Recommendations:

- +** Given that it represents the effective indicator for a continuous improvement in the provided funds to the program.
- +** Increasing financial support for research projects to match the costs of chemicals and characterization
- +** The program has to disseminate the positive outcomes of Faculty Members' Research Performance Evaluation and its impact on their promotional activities



Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-AP-02	Increasing financial support for research projects to match the costs of chemicals and analysis	Involve the faculty member in group research	Scientific Research Committee	Program Administration	1-9-2020	30-5-2020

KPI-AP-03: The percentage of students participating in extra-curricular activities.

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
84.4%	80%	Not available	Not available	85%

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
84.4%	80%	Not available	Not available	85%

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
84.4%	80%	Not available	- Not available	85%

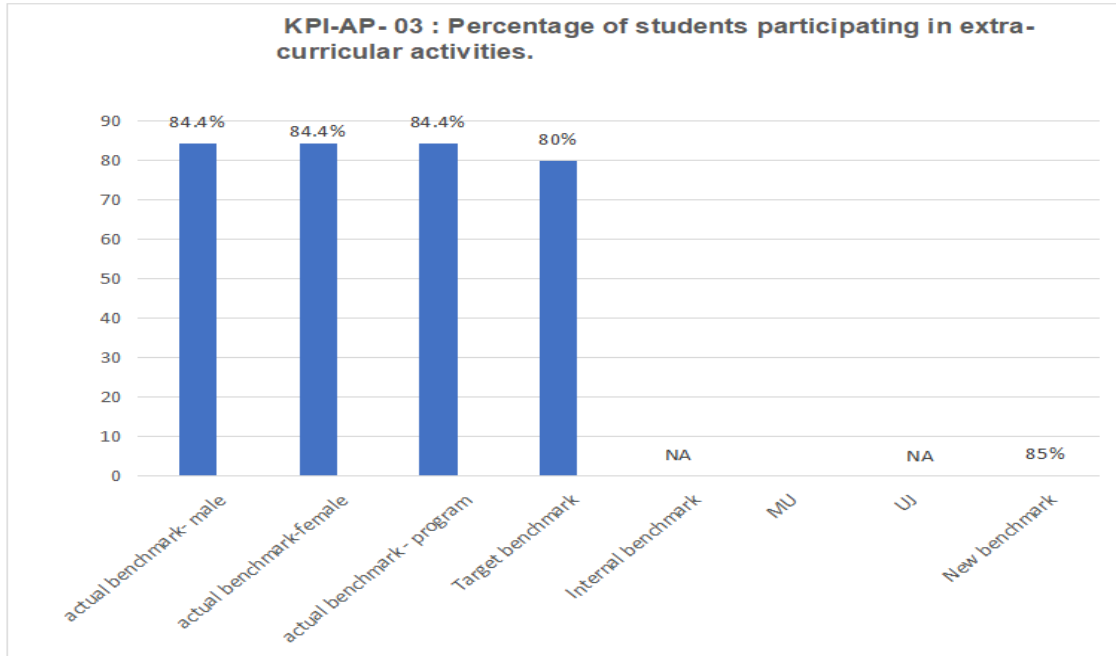


Figure 17: Percentage of students participating in extra-curricular activities in the program in the Chemistry program

Measurement way: The percentage of students participating in the activities extra-curricular=

$$\frac{\text{Average number of students participating in all extra – curricular activities} \times 100}{\text{The total number of students in the program}}$$

Analysis:

Figure 17: The results show that the Percentage of students participating in extra-curricular activities in the program in the Chemistry program in the academic year 1440- 1441 is 84.4 % that higher than the target and it is an accepted result.

Strengths:

- A good participation from the students and supervision from the staff members was noticed.

The reasons that led to the increment to achieve the target performance indicator is good participation from the students and supervision from the staff members

Result



The program students need more training and improvements of their practice, qualifications and skills

Recommendations:

Increase student-peer interaction.

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-AP-03	Increase student-peer interaction.	Establishing many students' extracurricular activities within the program and encouraging students to participate in them		Program Administration	1-9-2020	30-5-2020

KPI-AP-04: Employers' satisfaction with the program's mission, vision, and goals

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.9	4.0	Not available	Not available	4.0

(Male Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.9	4.0	Not available	Not available	4.0

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
3.9	4.0	Not available	Not available	4.0



Measurement way: Applying a questionnaire to survey the opinion of employers on a five-level scale annually

Employers' satisfaction with the program's target, vision and mission: 3.9



Figure 18: The results show that the employer's satisfaction with the program's mission, vision and goals in the program in the Chemistry program in the academic year 1440- 1441 is 3.9 % . That implies a continuous improvement in the mission content. Furthermore, the actual KPI No. is reached to the target one, therefore new benchmark is applied.

The benchmark calculated by a questionnaire is applied and analyzed on a scale from one to five.

Strengths:

It seems that there is a general satisfaction from employer on the program vision, mission, and objectives.

Cause:

The reasons that led to the increment to achieve the target performance indicator is the continuous contact with the employers and Informing them of all developments and developments in the mission and vision plan

Result

The program graduates need more training and improvements of their qualifications and skills

Recommendations:

- More efforts by the staff and institute to maintain this trust of the Employers' towards the graduates and the program.
- Given that it represents the effective indicator for measuring the employers satisfaction, therefore it should be given special attention by increasing interest in questionnaires and realizing the shortcomings of its items



✚ Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-AP-04	More efforts by the staff and institute to maintain this trust of the Employers' towards the graduates and the program.	Holding meetings with the employers to discuss the development in the program	Alumni unit	Program Administration	1-9-2022	30-5-2023

KPI-AP-05: Percentage of student graduation projects related to the surrounding community

Program

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
20%	30%	Not available	Not available	30%

(Male Section)

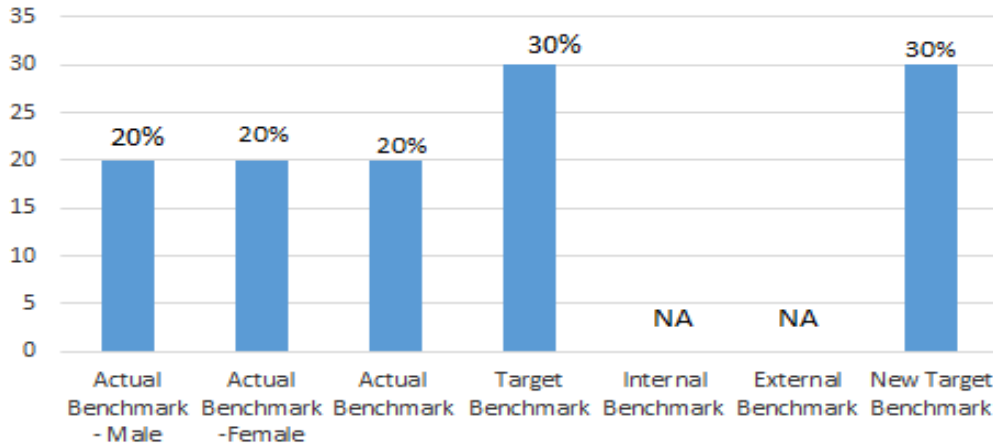
Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
20%	30%	Not available	Not available	30%

(Female Section)

Actual Benchmark	Target Benchmark	Internal Benchmark*	External Benchmark**	New Target Benchmark
20%	30%	Not available	Not available	30%



KPI-AP-05. Percentage of the student's graduation projects related to the surrounding community.



Measurement way: Percentage of student graduation projects related to the surrounding community

$$= \frac{\text{Number of community-related graduation projects}}{\text{The total number of graduation projects in the program}} \times 100$$

Analysis:

*The Proportion of the student's graduation projects of full time teaching and other staff actively engaged in community service activities is reported as 20% during the academic year 1440-1441H, that implies a continuous improvement in the provided student's graduation projects.

*The benchmark calculated as percentage.

Strengths

Percentage of the student's graduation projects related to the surrounding community in the Chemistry program, is more than that of the internal benchmark.

- **Cause:** The reason that led to the increment to achieve the target performance indicator is the continuous contact with the all aspects of research project related to the surrounding community



- **Result:** The Chemistry program continuously improves all aspects of research project related to the surrounding community

Recommendations:

- Academic advisors during the orientation sessions should discussed the key points with the students in order to improve their research experiences

Proposal Action plan

Number of KPI	Recommendations	Action	Responsible Person	Follow up	Start Date	Completion Date
KPI-AP-05	Academic advisors during the orientation sessions should discussed the key points with the students in order to improve their research experiences	Conduct meetings between the students and the staff	Community service unit	Program Administration	1-9-2020	30-5-2020

Action plan:

Number of KPI	Name of KPI	Recommendations	Action plan	Responsible Person	Start Date	Completion Date
KPI-P-01	Percentage of achieved indicators of the program operational plan objectives.	Adjust the operational plan	Prepare achievable operational plan	Operational plan committee	1-9-2020	15-4-2021
KPI-P-02	Students' Evaluation of quality of learning experience in the program	Forming permanent and temporary advisory teams from within and outside the university to follow up and advice.	holding seminars and sessions to improve the overall quality of their learning experiences	Quality and Academic accreditation committee	The end of the 1 st semester	The end of the 2 nd semester

KPI-P-03	Students' evaluation of the quality of the courses	The content of the courses should be updated	Update the courses references	courses coordinators	The end of the 1 st semester	The end of the 2 nd semester
KPI-P-04	Completion rate	Increased interest in students and students who are struggling through the affirmative, by emphasizing the basic principles of specialization. it's MORE important for staff to communicate with students privately one on one to stand on the problem they suffer from	An internal committee should be formed from all departments in order to verify the student's achievement \ Holding seminars to discuss the problems suffering the students to help them	Academic Advising Committee	The end of the 1 st semester	The end of the 2 nd semester
KPI-P-05	First-year student's retention rate	- The need for continuous evaluation to encourage students to work hard and	Verifications of students achievements in each program should be send to an audit outside university in order to gain	Academic Advising Committee	The end of the 1 st semester	The end of the 2 nd semester

		activate the role of academic advisor.	more special feedbacks			
KPI-P-06	Students' performance in the professional and/or national examinations	The number of student who entering the program and successfully complete first year is 39.18 % that is higher than the last year (10%) , also this indicator is not estimated with respect to the external benchmark. The value is very low that implies continuous			The end of the 2 st semester	The end of the 2 nd semester

		monitoring for this issue.				
KPI-P-07	Graduates' employability and enrolment in postgraduate programs	Establishing fair job -More data about employment agencies is required for program graduates, as well as a more effective mechanism for communicating with the graduate. - Invite more companies and	Established postgraduate program in chemistry department due to the majority of highly qualified teaching staff exist - Support the graduated student with some specialized high-level training courses that helps to raise the employment	Alumni Affairs Committee	The end of the 2 st semester	The end of the 2 nd semester

		businessmen in the employment forum	opportunities for our graduated students. -Work to set up partnerships with the business sector. -Work to organize various events such as Career Day (career absolvent) so that our students explore			
KPI-P-08	Average number of students in the class	More efforts has to be done by the institute to lower the number of students entering the chemistry program and/ or increase the number of classrooms and laboratories specially in female section	- increasing the number of classrooms and laboratories specially in female section	Student Affairs Committee	The end of the 1 st semester	The end of the 2 nd semester

KPI-P-09	Employers' evaluation of the program graduates proficiency.	<p>1-More efforts by the staff and institute to maintain this trust of the Employers' towards the graduates.</p> <p>2-Form a committee from the unit to follow the graduates in their jobs and find out the extent the institution's satisfaction with the graduate level</p>		-----	The beginning of the 1 st semester	The end of the 2 nd semester

<p>KPI-P-10</p>	<p>Students' satisfaction with the offered services</p>	<p>An appropriate strategy needs to be developed through focused group discussions with all the relevant stakeholders to improve the quality of facilities and equipment available to the program</p>	<p>Localization of Services, programs, events, and other community involvement opportunities. increasing the ability of individuals and groups to influence issues that affect them and their communities</p>	<p>Internal audit commitee</p>	<p>The end of the 1 st semester</p>	<p>The end of the 2nd semester</p>
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<p>KPI-P-11</p>	<p>Ratio of students to teaching staff</p>	<p>1-Organizing visits to secondary schools and introducing students to the program and the scientific horizons that can be achieved in their educational and practical journey.</p> <p>2-There is a need to increase the proportion of Associate and Full Professors in the female section.</p>	<p>Held seminars and workshop with sec. school students</p> <p>Joining more Assoc. Prof. and full Prof.</p>	<p>Faculty Contracting Committee</p>	<p>The end of the 1 st semester</p>	<p>The end of the 2nd semester</p>
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KPI-P-12	Percentage of teaching staff distribution	Associate professors and Full Prof. in female sections when new recruitment is considered.	Recruit associate professors in female sections when new recruitment is considered.	Faculty Contracting Committee	The end of the 2 nd semester	The end of the 2 nd semester
KPI-P-13	Proportion of teaching staff leaving the program		Increasing the stability of the faculty members of the program	University Contracting Committee	The end of the 2 nd semester	The end of the 2 nd semester
KPI-P-14	Percentage of publications of faculty members	Work to provide research laboratories equipped with the latest equipment to raise the rate of scientific publishing for faculty members of the program in scientific journals	- Involve the faculty member in group research - its great potential	Scientific Research Committee	The end of the 2 nd semester	The end of the 2 nd semester

		with high impact factors	-Develop the link with the community			
KPI-P-15	Rate of published research per faculty member	Work to provide research laboratories equipped with the latest equipment to raise the rate of scientific publishing for faculty members of the program in scientific journals	-The research supporting financial needs extra supports. -Overall, research must be further encouraged and enhanced as the number of ISI publications from the Department doesn't match	Scientific Research Committee	-----	-----

		with high impact factors.	its great potential -Develop the link with the community			
KPI-P-16	Citations rate in refereed journals per faculty member	Work to provide research laboratories equipped with the latest equipment to raise the rate of scientific publishing for faculty members of the program in scientific journals	-The research supporting financial needs extra supports. -Overall, research must be further encouraged and enhanced as the number of ISI publications from	Scientific Research Committee	The end of the 2 nd semester	The end of the 2 nd semester

		with high impact factors.	the Department doesn't match its great potential -Develop the link with the community			
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<p>KPI-P-17</p>	<p>Satisfaction of beneficiaries with the learning resources</p>	<p>Given that it represents the effective indicator for measuring the quality of teaching and learning in the program, therefore it should be given special attention by increasing interest in questionnaires and realizing the shortcomings of its items</p>			<p>The end of the 1 st semester</p>	<p>The end of the 2nd semester</p>
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KPI-AP-1:	Increasing the number of research groups to include all members of the department	During the semester	Scientific Research Committee	Has been improved but not completed	There is no additional support to financially support the research work	
KPI-AP-2:	Increasing financial support for research projects to match the costs of chemicals and analysis	During the semester	Scientific Research Committee	Has been improved but not completed	There is no additional support to financially support the research work	
KPI-AP-3:	Establishing many student extracurricular	During the semester	Scientific Research Committee	Has been improved but not completed	Not all the student participates to extracurricular activities especially	

	<p>activities within the program and encouraging students to participate in them</p> <p>Announcing these activities to students in different ways to increase the number of participating students.</p>				female students.	
KPI-AP-4:	<p>Establish an alumni unit to support the graduate's student employment and</p>	During the semester	Alumni Affairs Committee	Has been improved but not completed	not all graduate students are enrolled in the alumni unit	

	follow up their feedback					
KPI-AP-5:	<ul style="list-style-type: none"> - Develop the link with the community. - Establishment of a strategic plan for community services in the program. <p>Develop the established unit for community service</p>	During the semester	Scientific Research Committee	Has been improved but not completed	not all the student's graduation projects related proposed by the department are related to the surrounding community	

I. Action Plan Progress Report

1. Progress on Implementation of Previous Year's Action Plans					
Actions Planned	Planned Completion Date	Person Responsible	Completed	If Not Complete, Give	
				Reasons	Proposed action
KPI-AP-1: Increasing the number of research groups to include all members of the department	During the semester	Scientific Research Committee	Has been improved but not completed	There is no additional support to financially support the research work	
KPI-AP-2: Increasing financial support for research projects to match the costs of chemicals and analysis	During the semester	Scientific Research Committee	Has been improved but not completed	There is no additional support to financially support the research work	

<p>KPI-AP-3: Establishing many student extracurricular activities within the program and encouraging students to participate in them</p> <p>Announcing these activities to students in different ways to increase the number of participating students.</p>	<p>During the semester</p>	<p>Scientific Research Committee</p>	<p>Has been improved but not completed</p>	<p>Not all the student participates to extracurricular activities especially female students.</p>	
<p>KPI-AP-4: Establish an alumni unit to support the graduate's student employment and follow up their feedback</p>	<p>During the semester</p>	<p>Alumni Affairs Committee</p>	<p>Has been improved but not completed</p>	<p>not all graduate students are enrolled in the alumni unit</p>	

<p>KPI-AP-5:</p> <ul style="list-style-type: none"> - Develop the link with the community. - Establishment of a strategic plan for community services in the program. <p>Develop the established unit for community service</p>	<p>During the semester</p>	<p>Scientific Research Committee</p>	<p>Has been improved but not completed</p>	<p>not all the student's graduation projects related proposed by the department are related to the surrounding community</p>	
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Head of Department

Dr. Ibrahim H. Alsohaimi

