

Operational Plan Report 1443 H

Master of Science in Chemistry

GOAL 1: To prepare highly qualified graduates equipped with advanced, deep and specialized knowledge in all branches of chemistry.

Initiative (Strategy)	Procedure (Activity)	Responsible	KPIs	Target	Actual	Achievement (%)
1. Increase efficiency of academic programs	1.1 Create and develop highly-qualified master's programs.	Programs and Curricula Committee	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.75/5	4.5/5	95%
			KPI-PG-11: Percentage of faculty members' distribution based on academic ranking.	40:30:30	30:40:30	90%
	1.2 Measuring the achievement of learning outcomes and take advantage of the feedback.		KPI-PG-03: Students' evaluation of the quality of the courses.	4.75/5	4.8/5	100%
			KPI-PG-13: Satisfaction of beneficiaries with learning resources.	4.5/5	4.6/5	100%
2. Improve the academic and skill level for new master's students	2.1 Follow up the implementation of the admission criteria	Student Services unit	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.75/5	4.5/5	95%
			KPI-PG-05: Average time for students' graduation (years)	3.5	3.75	93 %
			KPI-PG-06: Rate of students dropping out of the program.	0.0%	2.5%	97.5%
3. Attracting highly qualified	3.1 Contracting with highly qualified and	Faculty Members Affairs	KPI-PG-10: Ratio of students to faculty members	1:1	1.75	100%

and excellent faculty members and researchers.	excellent faculty members. 3.2 Improving the college's ability to retain distinguished faculty members.	Committee	KPI-PG-12: Proportion of faculty members leaving the program	0	2	90%
4. Raising the professionalism of faculty members.	4.1 Provide training programs and workshops to develop the competency of faculty members	Academic Development and Quality Unit	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.75/5	4.5/5	95%
Achievement (%) of Goal 1						96%

Comments:

The satisfaction rate of students for the quality of learning experience (KPI-PG-02) has improved as compared to previous years (1438/1439; 91% and 1439/1440; 90%) but decreased as compared to the academic year 1441 (100%), however, it is matching the target level. The quality of teaching improved by using new teaching strategies, assessment methods, and learning resources. The satisfaction value for beneficiaries with learning resources (KPI-PG-13) is 4.6, higher than the target of 4.5. In the academic year 1443, the average time for students' graduation (KPI-PG-05) was 3.7, which is close to the targeted performance of (7 semesters). The table above showed that the rate of students dropping out of the program (KPI-PG-06) during the academic year 1443 was 2.5%, which does not equate to the targeted level (0%). This satisfactory result could be attributed to students' efficient teaching and supervision. The actual proportion of teaching staff leaving the program annually for reasons other than age retirement to the total number of teaching staff is 10%, markedly exceeding the target, which is good compared with the previous years.

GOAL 2: To enable students to solve the scientific problems and to have research and laboratories skills in chemistry.

Initiative (Strategy)	Procedure (Activity)	Responsible	KPIs	Target	Actual	Achievement (%)
1. The scientific and skill level for new students	1.1 Follow up the implementation of admission standards for the college and academic programs	Graduate Studies Committee	KPI-PG-14: Satisfaction of beneficiaries with research facilities and equipment.	4.0/5	3.2/5	80%
			KPI-PG-04: Students' evaluation of the quality of scientific supervision.	5.0/5	4.7/5	94%
2. Continuous improvement of the college infrastructure.	2.1 Providing an infrastructure for educational operations and scientific research.	College infrastructure Unit.	KPI-PG-14: Satisfaction of beneficiaries with research facilities and equipment.	4.0/5	3.2/5	80%
	2.2 Periodic maintenance of the infrastructure of the Department of chemistry					
3. Attracting highly qualified and excellent faculty members and researchers.	3.1 Creating research jobs in the college and attracting distinguished researchers	Faculty Members Affairs Committee	KPI-PG-15: Percentage of publications of faculty members.	100%	100%	100%
			KPI-PG-16: Rate of published research per faculty member.	15	21	100%
4. Encouraging faculty members to participate in funded research, locally and internationally	4.1 Monitor the efficiency of the scientific research of Department	The deanship of the scientific Research	KPI-PG-15: Percentage of publications of faculty members.	100%	100%	100%
			KPI-PG-16: Rate of published research per faculty member.	15	21	100%

			KPI-PG-17: Citations rate in refereed journals per faculty member.	150	190	100%
Achievement (%) of Goal 2						94%

Comments:

As shown in the above table, the program has fully achieved the initiatives for the second goal. The student's satisfaction rate for the quality of scientific supervision during the academic year 1443 was 4.7, which is almost close to the performance level of the previous year (1439-1441), and it was stable over the last three years. The student-supervisor relationship is vital to all research degrees. Therefore, close contact between supervisors and students is essential. The actual satisfaction rate regarding the adequacy of facilities and equipment in the college (KPI-PG-14) is recorded as 3.2, which is lower than the target level in the academic year 1443. The college should Improve the laboratory equipment to achieve the target next year to increase the KPI-PG-14. Over the last three years, the rate of published research per faculty member (KPI-PG-16) was noticeably increased. In addition, the actual recorded citations rate (KPI-PG-17) was higher than the target level, which proves the high quality of the research conducted in the department.

GOAL 3: To enable students in mastering the use of information technology and practicing effective communications to contribute in problem solving and enhancing the community.

Initiative (Strategy)	Procedure (Activity)	Responsible	KPIs	Target	Actual	Achievement (%)
1. Student services	1.1 Continuous activation of academic advising and guidance services.	Student Services Unit.	KPI-PG-09: Students' satisfaction with the provided services.	4.5/5	3.8/5	84%
2. Providing Software applications and electronic communication systems	2.1 Enhancing educational and research processes by providing relevant software applications.	College infrastructure Unit.	KPI-PG-09: Students' satisfaction with the provided services.	4.5/5	3.8/5	84%
	2.2 Improving the structure of electronic communication for educational, research and supportive purposes					
	2.3 Follow up on emergency and preventive maintenance of electronic communication infrastructure.					
3. increasing the community services	3.1 Creating programs and channels to activate community service	Community services unit	KPI-PG-13: Satisfaction of beneficiaries with learning resources.	4.5/5	4.6/5	100%
	3.2 Raising the level of community services provided by the college's staff and students.					
Achievement (%) of Goal 3						90%

Comments:

The rate of Students' satisfaction with the provided services in the academic year 1443 (KPI-PG-09) did not match the target level. The faculty members should raise the quality of the logistics service provided to students. On the other hand, the program didn't achieve the target performance for the satisfaction of beneficiaries with learning resources (KPI-PG-13). The satisfaction level is relatively high due to many efforts in planning and implementing improvements. Staff and students should be provided with awareness sessions about the library, including SDL and its update. Also, the teaching staff should update the textbooks and teaching materials.

GOAL 4: To earn students the skills of independent and life long learning and acquiring new advanced knowledge.

Initiative (Strategy)	Procedure (Activity)	Responsible	KPIs	Target	Actual	Achievement (%)
1. Student services	1.1 Raising the level of extra-curricular activities.	Student Services Unit.	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.7/5	4.5/5	95%
2. The Research activities of Department of Chemistry.	2.1 Encourage master's students to participate into the research activities (seminars - Scientific Day – workshops- conferences) organized by the department.	Scientific Research Committee	KPI-PG-16: Rate of published research per faculty member.	15	21	100%
			KPI-PG-04: Students' evaluation of the quality of scientific supervision.	5.0/5	4.7/5	94%
3. Scientific publishing	3.1 Participation of master students in the Scientific publishing.	Thesis advisor	KPI-PG-04: Students' evaluation of the quality of scientific supervision.	5.0/5	4.7/5	94%
			KPI-PG-18: Percentage of students' publication and conferences participation Publication: conferences	70 :10	25:1	30%
4. Master students' feedback	4.1 Provide written and/or oral feedback on classwork and homework	Course instructors	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.7/5	4.5/5	95%
			KPI-PG-03: Students' evaluation of the quality of the courses.	4.7/5	4.65/5	99%
Achievement (%) of Goal 4						87%

Comments:

The student's evaluation of the quality of courses (KPI-PG-03) supports the third standard of NCAA, i.e., Teaching and Learning. Students' assessment of the quality of their courses in the academic year 1443 is perfect, with a mean response of 4.65 compared to the target level. The satisfaction rate for the quality of the learning experience in the program (KPI-PG-02) was discussed in Goal 1. Moreover, the students rated the quality of scientific supervision (KPI-PG-04) as 94% decreased compared to the academic year 1441 (100%), which accounts for the efficient operational plan aiming at achieving the targeted objectives along with the impactful follow-up of the implementation of the plan. To maintain the sustainability of the extraordinary efforts paid for the operational plan objectives. The rate of published research per faculty member (KPI-PG-16) in the academic year 1443 was discussed in (Goal 2). Regarding the percentage of students' publications (KPI-PG-18), there is only one paper presented at a conference, which is lower than the target level due to the COVID-19 pandemic. However, the published research papers by the faculty members 100 % matches the target level.

GOAL 5: To supply all industrial sectors and scientific institutions in the kingdom with excellent competencies.

Initiative (Strategy)	Procedure (Activity)	Responsible	KPIs	Target	Actual	Achievement (%)
1. Research support and research partnerships	1.1 Increase research and financing partnerships with relevant authorities.	Research Center.	KPI-PG-19: Number of patents, innovative products, and awards of excellence.	1:1	0:0	0%
			KPI-PG-18: Percentage of students' publication and conferences	70 :10	25:1	30%
2. Development of the master's program.	2.1 Creating more disciplines according to the needs of local and national community	Graduate Studies Committee	KPI-PG-08: Employers' evaluation of the program graduates' competency.	5/5	4/5	80%
	2.2 Developing academic courses in line with the research development and the needs of the labor market	Plans and Curriculum Committee	KPI-PG-02: Students' Evaluation of quality of learning experience in the program.	4.7/5	4.5/5	94%
			KPI-PG-03: Students' evaluation of the quality of the courses.	4.7/5	4.65/5	99%
3. Research proposals	3.1 Focusing on applied research in the industrial fields.	Graduate Studies Committee	KPI-PG-18: Percentage of students' publication and conferences	70 :10	25:1	30%
			KPI-PG-19: Number of patents, innovative products, and awards of excellence.	1:1	0:0	0%

4. Improving the academic job rates of Saudi citizens	4.1 Contracting with Saudi lecturers who hold a Master's degree	Faculty Members Affairs Committee	KPI-PG-07: Graduates' employability.	80%	60%	75%
Achievement (%) of Goal 5						51%

Comments:

In the academic year 1443, the average value of 51% for KPIs that measure the achievement of initiatives in Goal 5 is significantly less than the target performance. This might be due to the Graduates' employability (KPI-PG-07). The actual implementation of KPI-PG-18 is deficient. Also, the actual performance of KPI-PG-19 is zero, where no patents and innovative products and awards of excellence. The college should continue to encourage all faculty members to publish high-quality work.

Conclusion: The following table summarizes the average for actual and target performances of initiatives for each goal of the master's program in the academic year 1443. In conclusion, the overall result showed that the program achieved its target performance of 84%. However, improvement involving more faculty in community service activities is required and increasing the research facilities and equipment.

No	Goal statement	Goal Achievement
1	To prepare highly qualified graduates equipped with advanced, deep and specialized knowledge in all branches of chemistry.	96%
2	To enable students to solve the scientific problems and to have research and laboratories skills in chemistry.	94%
3	To enable students in mastering the use of information technology and practicing effective communications to contribute in problem solving and enhancing the community.	90%
4	To earn students the skills of independent and lifelong learning and acquiring new advanced knowledge.	87%
5	To supply all industrial sectors and scientific institutions in the kingdom with excellent competencies.	51%
Annual Achievement		84 %

Total number of KPIs used	18
Number of achieved indicators	12
Percentage of achieved indicators of the program operational plan objectives (KPI-PG-01)	67%