

KINGDOM OF SAUDI ARABIA

Ministry Of Education

University of Bisha

Faculty of Science



المملكة العربية السعودية
وزارة التعليم
جامعة بيشة
كلية العلوم

**Chemistry Department
Development and Quality
Committee**

قسم الكيمياء
لجنة التطوير والجودة

Chemistry ROGRAM OPERATIONAL PLAN

2022-2023

UNIVERSITY OF BISHA
FACULTY OF SCIENCE
BACHELOR OF SCIENCE IN CHEMISTRY



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Program Mission

To prepare qualified students in Chemical science by providing a unique educational curriculum that is in line with the needs of the labor market, promoting scientific research, and effectively contributing to community service.

The Program mission can be simplified as:

PM1: Prepare qualified students in Chemical science.

PM2: Scientific research

PM3: Community services.

PM4: Address the evolving needs of society and labor market.

Program operational goals

- 1 Equip graduates with scientific knowledge, practical, interactive skills, creative and competitive abilities.
- 2 Improve quality and quantity of scientific research in Chemical science.
- 3 Enhance community participation and partnership, through providing appropriate education and counseling services.
- 4 Qualifying the program to obtain internal and external program accreditation.

Alignment between program operational goals and program mission

		Program Mission			
		PM1	PM2	PM3	PM4
Program operational goals	POG 1		√		
	POBJ 2			√	
	POBJ 3	√			
	POBJ 4				√



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Goal	Specific objectives
Equip graduates with scientific knowledge, practical, interactive skills, creative and competitive abilities.	<ul style="list-style-type: none">➤ Promote excellence and opportunities in Chemical practice based on evidence.➤ Encourage improvement and creativeness among the students in various fields of Chemistry.➤ Develop teaching strategies appropriate to student learning.➤ Developing the student counseling system at the program.➤ Upgrading the level of student services and activities.➤ Enhancing loyalty and institutional and national affiliation among program students.➤ Implement a risk assessment and management process.➤ Inspire innovation and creativity among college students in a variety of fields and honor their achievements.➤ Maintain positive, supportive, and motivating academic environment for program staff and students.
Improve quality and quantity of scientific research in Chemical science.	<ul style="list-style-type: none">➤ Improving the quality of scientific research and innovation according to development priorities.➤ Providing research support to faculty and students.➤ Develop collaborative research opportunities.
Enhance community participation and partnership, through providing appropriate education and counseling services.	<ul style="list-style-type: none">➤ Highlight the role of the program in community service by providing advisory consultant, education, and any services related to solving Chemical and environmental issues.➤ Disseminate of Chemical and environmental hazards education➤ Encourage program staff and students to participate in workshops related to Chemical and environmental hazards.



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	<ul style="list-style-type: none">➤ Monitor and document community services using structured digital database.
Qualifying the program to obtain internal and external program accreditation.	<ul style="list-style-type: none">➤ Incorporate continuous evaluation and a culture of quality into the program's operations.➤ Designing an effective quality assurance system using a systematic approach.➤ Obtaining full accreditation for the program and meeting quality assurance requirements.



Goal 1:- Equip graduates with scientific knowledge, practical, interactive skills, creative and competitive abilities.

Objectives	Projects/ Initiative	Action	Requirements Resource/ Support	Primary Responsible	Follow up Responsibility	OP. KPI	OP. KPI Target	Completion Date
Encourage improvement and creativeness among the students in various fields of Chemistry.	Ensure Periodical systematic review of the program.	Establish a structured working schedule for the Chemistry program curriculum committee.	Curriculum Committee.	Chemistry program Curriculum Committee	Operational plans follow up steering committee	Number of programs curriculum committee meetings per year.	3 per academic year	6-2023
		Biannually, the Chemistry program curriculum committee nominates and approves independent reviewers. Independent reviewers will submit a final report to the curriculum committee. The curriculum committee sends reviewers' recommendations to the quality committee. Reviewers' comments are reviewed by the quality committee, and it ensures that the university's quality guidelines are followed.	Curriculum Committee. Executive management support. Faculty Quality unit			Number of independent reviewer reports.	2 independent reviewer reports for program specification review and one for each dominate program courses	8-2022

		<p>The curriculum committee will ensure that the recommendations of the reviewers are implemented.</p> <p>Chemistry program curriculum committee implements the action plan, and course management process.</p> <p>Enhance structured schedule meeting for advisory committee.</p> <p>The Advisory committee will submit a final report to the curriculum committee.</p> <p>The curriculum committee develops an action plan based on advisory committee recommendations.</p> <p>Monitor the implementation of stakeholders' survey action plans.</p>						
	Incorporate evidence-based Chemical practices into a variety of Chemical disciplines.	<p>Monitor course reports each semester to guarantee that information is kept current and evidence-based practice is implemented in different courses in Chemistry.</p> <p>Present a review report and action plan to the</p>	Development and quality committee	Curriculum Committee.	Operational plan follow up steering committee	Percentage of courses applying evidence-based Chemical practices into a variety of Chemical disciplines.	50%	12-2022

		quality unit for evaluation, then pass it along to the curriculum committee. Ensure the implementation of the action plan.						
	Encourage the final year student and graduated student for training.	Conduct an orientation workshop for field training. Evaluate the students, faculty, and filed staff about field experience training:	Orientation workshop concerning	Field training committee	Operational plan follow up steering committee	Percentage of student participate in Field training Percentage of faculty who guided students in field training. -Satisfaction of students regarding field of experience	50% 100% 3.7	6-2023 5-2023 4-2023
	Ensure the efficacy of learning resources	Have periodic meetings with the Library and Learning Resources Committee and associated stakeholders to recognize educational necessities.	Support from Deans' office and Students & Academic Affairs	Library and Learning Resources committee	Operational plan follow up steering committee.	Library and Learning Resources Committee meeting minutes	2 small meeting	4-2023
		Assess faculty and stakeholders' satisfaction with learning resources per year.	Institutional assessment and evaluation unit	Manager of Students Affaires staff	Operational plan follow up steering committee	faculty and stakeholders' satisfaction with learning resources	4.0/5.0	5-2023

		Analyze the results of the stakeholders' survey and create an action plan to monitor the execution of the plan.	Development and quality unit	Chemistry program surveys committees	Operational plan follow up steering committee	Corrective action plan	Approved action plan	6-2023
		Create a comprehensive student orientation program that educates students on the effective use of resources, including Blackboard, help request systems, and digital library resources.	Academic affairs Chairperson of Library and Learning Resources Committee.	Chemistry program E learning committee and learning resources committee	Operational plan follow up steering committee	Students' overall evaluation of learning resources	83.0%	9-2022
Encourage improvement and creativeness among the students in various fields of Chemistry.	Encourage students and staff of the Chemistry program to actively engage in research and innovation within creative fields.	Develop a mechanism for rewarding students.	HOD College Dean University student's affairs deanship	Student affairs committee	Operational plan follow up steering committee	Number of rewards	At least 8 rewards at the level of program, college and university	4-2023
Develop teaching strategies appropriate to student learning.	Monitoring the effectiveness of teaching, learning, and assessment methods	Annually evaluate the level of satisfaction among stakeholders and instructors with the learning resources. Submit PLO Assessment report with action plan to	Support from the head of the department	Students Affaires staff	Operational plan follow up steering committee	Students' overall satisfaction regrading learning resources	3.5/5	

		<p>curriculum sub-committee.</p> <p>Tracking of students' progress through yearly GPA</p> <p>Create an action plan based on the result.</p> <p>Create a timetable for staff development that includes all available teaching and assessment sessions.</p> <p>Disseminate professional development opportunities for faculty.</p> <p>Receive feedback from faculty on the attendance of the workshops.</p> <p>Develop a Schedule for program exit test for the student in the last level.</p> <p>Develop an action plan based on the result.</p> <p>Follow up the</p>						<p>9-2022</p> <p>To</p> <p>5-2023</p>
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		implementation of the action plan.						
	Ensure proper tanning of academic staff regarding advanced teaching and learning strategies.	Develop a plan for training faculty staff regarding teaching and learning strategies. Evaluate the impact of training on academic staff teaching performance,	Curriculum Committee.	Chemistry program curricula committee	Operational plan follow up steering committee	Percentage of faculty who were peer reviewed.	100% of staff attend	9-2022 To 5-2023
Developing the student counseling system at the program	Facilitate the provision of academic, social and career counselling and advising services to students.	Conduct orientation to students about academic advising and counselling.	Development and quality committee	Students' Affairs	Operational plans follow up steering committee	Attendance of new students in advising and counselling orientation workshop	100% of new students attend workshops.	9-200
		Conduct students' survey to evaluate the effectiveness of academic a advising and counselling process per semester.				Student evaluation of academic and career counselling.	3.5/5	4-2023
		Develop an action plan based on data analysis.				Corrective action plan	Corrective action plan	4-2023
		Conduct an annual Career Counselling Day for all undergraduate students attended by employers and experts in labor markets.				Attendance of final year students in advising and counselling	100% of final year students attend workshop.	5.2023
			Survey analysis committee					

						orientation workshop		
Upgrading the level of student services and activities.	Develop and update. Extracurricular activities Plan annually	Improve the extracurricular activities plan of Chemistry program based on PLOs and in accordance with University of Bisha extracurricular activities. Review and approve of extracurricular activities Plan. Format a student's teams for implementation for activities. Provide annual report regarding achieved activities. Evaluate students' satisfaction regarding the extracurricular activities plan.	Students' affairs unit at the college level	Chemistry program students affairs committee	Operational plan follow up steering committee	Activities plan Activities report. Number of events number of student's participants Satisfaction of students reading regarding the extracurricular activities plan.	1 1 15 70% of the students in the Chemistry program 4.0/5.0	9-2022 5-2023 6-2023 6-2023 6-2023
Enhancing loyalty and institutional and national affiliation among	Encourage students to participate in national activities.	-Workshop -Student meetings. -Students participation in celebrations of national programs.	University student's affairs deanship		Operational plan follow up	workshops small Meeting students' participation in	5 workshops 3 small Meeting	9-2022 6-2023

program students.				Student affairs committee	steering committee	celebration of national programs	70% of students' participation in celebration of national programs	
Implement a risk assessment and management process.	Risk assessment and risk management	Draft risk management strategy to cover academic, research, community, administration, and campus environment.	College University Taskforce for Risk Management	Dean Associate dean, academic and student affairs	Operational plan follow up steering committee	Draft risk management plan	Draft risk management plan	9-2022
		Review risk management plan						5-2023
		Get the approval for the risk management plan						
		Activate the risk management plan						
Inspire innovation and creativity among college students in a variety of fields and honor their achievements.	Provide new faculty, staff, and students an orientation program.	Conduct orientation program for faculty, staff, and students.	Academic advisor Students affairs Appeal Committee	students' affairs committee	Operational plan follow up steering committee	Percentage of new faculty and students who attended the orientation.	100%	10-2023
		Monitor the effectiveness of the orientation program for faculty, staff, and students.					Satisfaction of faculty and students who attended the Orientation program.	4.0/5.0

	Improve approaches to recruiting and retaining engaged, talented, and creative faculty and staff.	Conduct regular faculty satisfaction survey about recruitment process.	College Dean University HR	HOD	Operational plan follow up steering committee	faculty's satisfaction survey about recruitment process	80.0%	10-2022
	Hire faculty with diverse specialties and nationalities.	Assess yearly the needs of Chemistry program in relation to projected students' number. Regularly monitor faculty/students' ratio yearly. Orient the faculty about faculty experience survey.	University HR	HOD	Operational plan follow up steering committee	Ratio of student to staff	1:16	5-2023
	Improve Chemistry program employee satisfaction.	Analyze data collected by the faculty and staff satisfaction survey.	Academic Affairs/ Administration Assistant University HR	HOD	Operational plan follow up steering committee	Faculty response rate to complete faculty experience survey.	100%	5-2023
Develop an action plan based on survey results.		Satisfaction rate of faculty				4.0/5.0	9-2022	
Develop a plan for staff development based on their needs annually.		Proportion of teaching staff participating each year in				100%	5-2023	

						professional development activities.		
	Maintain faculty professional development activities.	Monitor the effectiveness of professional development activities	Development and quality committee	Training & development steering committee	Operational plan follow up steering committee	Percentage of faculty who perceived having access to enhancement opportunities	100%	9-2022 To 5-2023
	Developing mechanisms for evaluating the performance of the department's employees	Evaluate Faculty satisfaction with faculty assessment criteria.	College Dean University HR	HOD	Operational plan follow up steering committee	Faculty satisfaction with appraisal procedure.	3.5/5	5-2023

Goal 2:- Improve quality and quantity of scientific research in Chemical science.

Objectives	Projects/ Initiative	Action	Requirements Resources/ Support	Primary Responsible	Follow up responsibility	KPI	KPI Target	Comple tion Date
Improving the quality of scientific research and innovation according to development priorities.	Maintain and foster the orientation program about Research bylaws, policies and opportunities	Provide an orientation program for faculty and staff in collaboration with research bylaws, policies, and opportunities	Orientation program package that includes: PowerPoint presentation. Brochures. Handouts Roll outs. Information technology.	Chemistry program research committee	Operational plan follow up steering committee	Percentage of faculty who attend orientation sessions.	100%	9-2022 6-2023
	Address national research priorities	Encourage faculty to conduct research in the priority areas by the formulation of research groups. Disseminate information regarding the national research priority areas.	Guidelines for the formulation and functioning of research groups.	College research unit Deanship of scientific research	Operational plan follow up steering committee	Number of research related to the National Research priorities	1 -2 per year	9-2022 To 8-2023
	Encourage faculty to publish especially in high impact factor Journals	Identify journals related to Chemistry and Chemical Science with high impact factor and orientate faculty on this. Develop guidelines on how to identify predatory journals.	list high impact factor journal Guidelines for identifying predatory publications are available. The Dean's annual award for faculty	College research unit Deanship of scientific research	Operational plan follow up steering committee	The percentage of faculty published in journals with high an impact factor. Proportion	50%	9-2022 To 8-2023

		Establish a yearly Dean's award for faculty who publish in high impact factor journal.	who publish in high impact factor journals. Research Unit members. Dean's office			of full-time members of teaching staff with at least one research paper.		
Providing research support to faculty and students.	Enhance utilization research supportive resources for student and faculty	Identify and orient faculty and staff on available resources. Facilitate the access to available resources.	Data bases and literature required are available in the library. Orientation package regarding available resources. List of available resources including software, data bases and laboratories.	College research unit Deanship of scientific research Chemistry program research committee	Operational plan follow up steering committee	Attendance of Chemistry program faculty staff in the orientation program	100%	9-2022 To 6-2023
	Maintain mentorship for students and junior faculty in research.	Encourage faculty to include students and junior staff in their research projects. Develop mentorship programs to provide support and mentorship to the faculty and student.	Mentorship program. Satisfaction survey tool. Student Research data base. Faculty research data base.	College research unit Deanship of scientific research Chemistry program research committee	Operational plan follow up steering committee	Participation of students in funded research projects	Participation of 2-4 students per year	9-2022 To 6-2023
	Promote opportunities to identify and Secure	Identify funding sources. Disseminate information regarding sources of funds	List of funding sources. Provide training	College research unit Deanship of scientific	Operational plan follow up steering	Attendance of Chemistry program	100%	9-2022 To

	funding resources for faculty and students.	to faculty. Facilitate training on how to write a proposal to access funding.	courses on how to write a proposal to access funding.	research. Chemistry program research committee	committee	faculty staff attend training courses regarding how to write a proposal to access funding.		6-2023
	Motivate Undergraduate students to publish their work	Orient students about funding for publication and conference presentations. Establish criteria for the Deans' Award for undergraduate student publications.	Orientation program for students on funding for publications and conference presentation. Student Research Data Base.	College research unit Deanship of scientific research Chemistry program research committee	Operational plan follow up steering committee	Attendance of Chemistry program student in the orientation program Publication of undergraduate research paper	Attendance of 80% of program student. Publication of 2 undergraduate research paper	9-2022 To 6-2023
Develop collaborative research opportunities.	Participate faculty in community -led research project.	Provide an orientation on community-based research. Formulate research groups that will undertake community research projects. Orientation about funding related to community projects.	Orientation program on community-based research. Guidelines for formulation and functioning of community-based research groups. Orientation program related to funding	College research unit. Deanship of scientific research Chemistry program research committee	Operational plan follow up steering committee	Attendance of Chemistry program faculty staff in the orientation program. Formulate Research groups that will	100% Attendance of Chemistry program faculty staff in the orientation program 4 research groups.	9-2023 To 6-2022

			for community projects. Community Service Unit.			undertake community research projects.		
	Support and foster collaborative research among male and female campuses.	Identify common areas of research interests for collaborative research among the two campuses. Disseminate information regarding areas of interest to faculty among the two campuses. Facilitate data collection between the two campuses as collaborators	List of common areas of research interest. Orientation program regarding the common areas of interest among the two campuses. List of key persons to facilitate data collection amongst the two campuses. A written plan for organization of international conferences between the two campuses.	College research unit Deanship of scientific research Chemistry program research committee	Operational plan follow up steering committee	Number of research that established between two campuses	2 research papers	9-2023 To 6-2023

Goal 3:- Enhance community participation and partnership, through providing appropriate education and counseling services

Objectives	Projects/ Initiative	Action	Requirements Resources/ Support	Primary Responsible	Follow up responsibility	OP. KPI	OP. KPI Target	Completion Date
Highlight the role of the program in community service by providing advisory consultant, education, and any services related to solving Chemical and environmental issues.	Identify the community and environmental needs	Communicate with various community agencies to identify their needs by the end of each academic year. Develop need assessment plan and based on survey feedback, community	College social responsibility Unit	Chemistry program social responsibility committee	Operational plan follow up committee members	Number of activities based on community needs.	-Report regarding community needs	9-2022
	Activating community partnership with non-profit organizations and with the government and private sectors	Evaluate community needs plan. Develop community participation plan based on community needs. Review and approve Chemistry program community participation plan Encourage participation of program students in community participation activities. Encourage participation of program faculty members in community participation activities.	College social responsibility Unit	Chemistry program social responsibility committee	Operational plan follow up committee members	community participation plan participation of program students in community activities. participation of program academic in community activities.	Community participation plan 100% of program students 100% of program academic staff	9-2022 To 4-2023
Disseminate of Chemical and	Utilize social media to	Develop social media accounts (YouTube,	College social responsibility	Chemistry program social	Operational plans follow	Number of social media	At least 10 posts /	10-2022

environmental hazards education	announce, educate and interact with the community	<p>Facebook, Instagram, and Snapchat) within the university system to target the general population.</p> <p>Collaborate with Chemistry program HOD to submit short educational material to be posted on Chemistry program website and social media accounts.</p> <p>Disseminate effective environmental hazards educational materials via the Chemistry program social media account.</p> <p>Assess the effectiveness of the Chemical and environmental hazards education via public responses in social media</p>	Unit	responsibility committee	up committee members	<p>posts in the community activities</p> <p>Number of community education programs that lunched through the social media accounts.</p>	month	5 programs / year
Encourage program staff and students to participate in workshops related to Chemical and environmental hazards.	Promoting the culture of volunteer work among students and employees of the program	<p>Encourage students and program employees regarding the solving of Chemical and environmental issues.</p> <p>Encourage students and program employees to participate and present</p>	College social responsibility Unit	Chemistry program social responsibility committee.	Operational plan follow up committee members	<p>Schedule a plan for program activities.</p> <p>participation of program students in community activities.</p>	plan for program activities.	<p>9-2022</p> <p>To</p> <p>5-2023</p>

		workshops on Chemical and environmental hazards.				participation of program academic in community activities.	100% of program academic staff	
	Activating community partnership with institutions in The government and private sectors	Inventory of areas and places that can be established partnerships with it. Writing reports on activities and services provided to the community	College Dean	HOD	Operational plan follow up committee members	Number of partnerships. Reports on activities and services provided to the community	1 1 annual report	9-2022 To 5-2023
Monitor and document community services using structured digital database.	Utilization of community database for community activities	Develop an online database for students and alumni. Activate the automated online monitoring system.	College social responsibility Unit	Chemistry program social responsibility committee	Operational plan follow up committee members	Percentage of community activities which utilized the database	100% of planned activities	9-2022 To 5-2023

Goal 4: Qualifying the program to obtain internal and external program accreditation.

Objectives	Projects/ Initiative	Action	Requirements Resources/ Support	Primary Responsible	Follow up responsibility	KPI	KPI Target	Completion Date
Incorporate continuous evaluation and a culture of quality into the program's operations.	Improve awareness of academic staff, nonacademic staff and students regarding quality culture and related practice.	Development and quality plan for training for academic staff and students	Development and quality deanship	Development and quality committee	Operational plan follow up steering committee	Development and quality committee plan	6 training courses	9-2022
		Developing Quality management manual.					academic staff attend training courses.	100% of all academic staff attend training courses.
						students attend training courses.	70% of students attend training courses.	4-2023
Designing an effective quality assurance system using a systematic approach.	Determine the processes necessary to develop the quality assurance management system initiative and implementation	<p>Developing development and quality committee.</p> <p>Develop a plan for development and quality committee action plan.</p> <p>Developing development and quality related polices.</p> <p>-Developing Chemistry program plan for surveys assessment.</p> <p>Developing Chemistry program plan for following corrective actions plan.</p> <p>-Schedule for all Chemistry program quality related</p>	Development and quality deanship	Development and quality committee	Operational plan follow up steering committee	Development and quality committee plan	<p>Chemistry program plan for development and quality committee.</p> <p>Chemistry program plan for surveys assessment.</p> <p>Chemistry program plan for PLOs assessment.</p> <p>Chemistry program plan for KPIs assessment.</p>	2021-2023

		tasks -reviewing -PLOs assessment plan -KPIs assessment plan						
Obtaining full accreditation for the program and meeting quality assurance requirements.	Follow up implementation of NCAAA recommendation for obtaining full accreditation	-Schedule a plan for implementing NCAAA recommendation	Development and quality deanship	Development and quality committee	Operational plan follow up steering committee	Reports of Schedule a plan for implementing NCAAA recommendation	Implementation of 100% of NCAAA recommendations	2023-2024

