



# Program Quality System Manual

## Department of Chemistry

College of Sciences

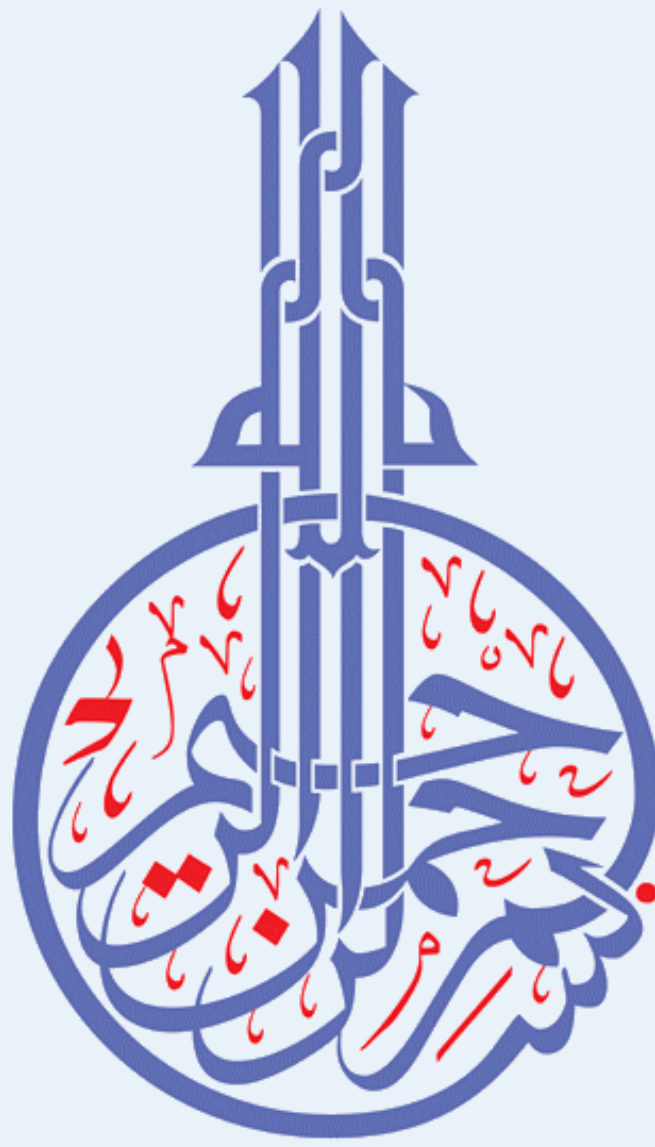
Jouf University, KSA

Prepared by Quality Team at Department of Chemistry,  
College of Science

Reviewed annually



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يوم الجودة العالمي 2021  
الاستدامة: تحسين منتجاتنا ومجتمعاتنا وكوكبنا

رؤية  
2030  
المملكة العربية السعودية  
KINGDOM OF SAUDI ARABIA



# نأمل في تحقيق رؤية مستقبلية تكون المملكة بخدماتها ومنتجاتها معياراً عالمياً للجودة و الإتيقان

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# Manual Content

Definitions in the Quality	6
Chapter One: Quality Manual Introduction	8
1. Introduction	9
Chapter Two: Organization Structure of the Quality Management	11
2. 1. Organization structure of the program	12
2.2. Quality Management System in the program of chemistry	13
2.2.1. Department Council	13
2.2.2. Head of the department	13
Department Committees	14
I. Scientific research committee	14
II. Academic advising committee	14
III. Quality committee	16
IV. Advisory committee	16
V. Academic affairs committee	17
VI. Study plan committee	17
VII. Internal Audit committee	18
VIII. E-Learning committee	19
IX. Community service committee	19
X. Alumni committee	19
XI. Laboratory and instrumentation committee	20
Academic Standard	21
Chapter Three: Policy and Systems of Quality in the program of chemistry	22
3. Policy and Quality Systems	23
3-1 Quality Assurance Policies	23
3-2 Jof university Policies	23
3-3 Quality Assurance Management	24
3-4 Tasks and Responsibilities of the Program Quality committee	25
Chapter Four: Cycle of quality assurance	29
Program Quality Monitoring Procedures	30
1-Plan	33
2-Perform	34
3-Monitor	35
4-Improve	36
Quality assurance activities of the Program	37
Program Evaluation Matrix	38
Program Key Performance Indicator	39
5.1. Program and Courses Specifications	42
5.2. Course and Program Reports	43
5.3. Field experience specification and reports	44
5.4. Course Files	44
5.5. Program's Key Performance Indicators	45
5.6. Program's Self-study	49
References	50



# Definitions in the Quality

# 1. Definitions in the Quality

## **Quality**

it is meet of requirements for customer as good product or service

## **Quality Assurance (QA)**

process in which determines both strengths and weaknesses points, and corrective and protective plan in academic program leading to its quality improvement.

## **Academic Program**

A set of courses and practical elements leading a student to award of an academic degree upon successful completion.

## **Courses:**

Multiple units within the program through which the students achieve some of the learning outcomes through hours within the course plan. These courses can be requisite or elective.

## **Course:**

Scientific content in one of the fields, which constitutes a set of knowledge and skills based on appropriate teaching strategies and evaluation tools. It helps achieve the goals and learning outcomes of the program.

## **Academic qualification:**

A degree awarded to a student upon the completion of an integrated program such as the bachelor's degree.

## **Accreditation:**

Accreditation is a peer process whereby a private, nongovernmental body grants public recognition to an institution or specialized program that meets or exceeds nationally established standards of acceptable educational quality.

## **Institutional accreditation:**

The accreditation of an institution by the accrediting body for a specific period of time following verification of the minimum accreditation criteria in all aspects of the institution.

## **Program accreditation:**

The accreditation of an academic program by the accrediting body for a specific period of time following verification of the program quality and achieving the minimum accreditation criteria of the accrediting body. Academic Standards.

## **Academic Reference standard:**

Reference points against which the standards and quality of the program will be compared, therefore, they displaying general expectations about achievement levels and general characteristics that must be met by a graduate of the program.

## **Academic Standard:**

These are specific criteria approved by the institution; they are design from external national or international references and include the minimum skills and knowledge that are acquire by the program's graduates and supposed to be fulfill the institution's stated mission.



# 1. Definitions in the Quality

## **Action Plans:**

The set of different activities that are design in clear sequence to accomplish specific goals.

## **Annual Report:**

This is annual self-evaluation report for the educational institution that is prepare based on the reports of academic programs and the various activities that fulfill the mission of the institution.

## **Documentation:**

This is process of achieving and recording work data in the institution. Therefore, this data can be analyze and yield results will use for designing action plans.

## **Effectiveness of Quality Management and Enhancement:**

The efficiency of the quality system used within the organization and its ability to achieve the desired achievements and achieve the goal satisfaction of all beneficiaries.

## **Review:**

This is process of reviewing and evaluating the programs and activities by internal auditing committee and by independent external individuals (Reviewers).

## **Saudi Arabian Qualification Framework (NQF)**

The SAQF is a framework that is intended to support the development of skills and competence for transforming economy, personal development, mobility and employability and drive career paths, including improved opportunities for transferability between academia, training and employment.

## **Learning Outcomes:**

The knowledge and targeted skills acquired by students in a program courses or educational program.

## **Teaching strategies:**

This is specific methods such as case studies, practical work, and class discussion, which are apply to develop students' knowledge and skills in various fields.

## **Students' achievement:**

The level of students' performance within the educational institution, which reflects their achievement of knowledge and skills.

## **Key performance indicators:**

These are variables use assess the program performance by comparing actual results with the planned ones.



# Chapter One: Quality Manual Introduction



The background of the slide features a map of Saudi Arabia, showing its geographical outline and internal administrative boundaries. The map is rendered in a light blue and white color scheme, with a darker blue overlay at the top where the title is located.

# Introduction

## 1.1 Introduction

Quality Assurance process determines both strengths and weaknesses, and corrective and protective plans in academic programs leading to its quality improvement. Teaching quality is becoming a strategic direction of the higher education repairs in the Arab area and in the heart of Saudi Arabia. Its importance is recently gaining more and more recognition by both the policy makers as well as the various providers of higher education. For Chemistry Program, a vision to keep abreast of the age and to the leadership in the academic and community services, in order to realize the vision of 2030 in preparing distinguished cadres in the field of Chemistry to serve the nation in various fields of life. Hence the role of the National Center for Academic Accreditation and Evaluation (NCAAA) in the adoption and evaluation of academic programs, including Chemistry program to be achieved improvement, quality and excellence. Accreditation of the programs is being based on a set of indicators known as the key performance indicators (KPIs) been adopted by the Center (NCAAA) and the quality management system at Jouf University. Moreover, indicators of learning outcomes are approved by the college of science.

KPIs are collected through different questionnaires for teaching staff, undergraduates, and employers, as well as statistics on numerical achievements and values of learning outcomes indicators. All achieved KPIs of Chemistry program should be compared with internal or external benchmarks. This report uses qualitative and quantitative methods to achieve the objectives of program. 21 key performance indicators were provided by NCAAA. According to the Quality Management System (QMS) of college of Science, one of the tasks of quality and development committee in the program. In total, 18 questionnaires are being distributed to teaching staff, student and stakeholders. from planning, implementation, monitoring and to improvement.

A questionnaire was being designed based on the rate of agreement chosen KPIs in five-point scale (1 .00 –Strongly Disagree, 2 .00 –Disagree, 3 .00 –Not Sure, 4 .00 –Agree, 5 .00 –Strongly Agree) and Analysis of questionnaires are being done using statistical mean, percentages and/ or standard deviation. Any data can be used to measure the achievement in a program. Moreover, Statistics for numbers of students, graduates, teaching staff, citations and publications. Values of KPIs of the last years were used as an internal benchmark. An internal monitoring system which will regularly measure the effectiveness of the procedures. A self-evaluation system which will examine and report on the quality of programmers and services. Here, various committees perform in an integration with director of the programs in administration academically and environmentally to control of the quality from planning, implementation, monitoring and to improvement.



# Introduction

## 1.2. Program Vision, Mission, and Goals

Vision, mission and goals of the Chemistry program are submitted in website of Department of Chemistry, these mission and goals of the Chemistry program are consistent with mission and goals of college of Science.

### Program Vision:

Excellence in teaching Chemistry and scientific research and its applications to contribute to the service of society.

### Program Mission:

Preparation of the scientific competencies in the field of Chemistry for community development and to solve environmental problems through applied research.

### Program Goals:

- Developing the curriculum and courses to attain educational outcomes that meet the academic standards in the Kingdom.
- Developing the capabilities of the academic and technical staff to assist the educational process.
- Qualifying program students with advanced fundamental sciences in the field of chemistry.
- Conducting scientific research to keep up with scientific development in chemistry.
- Providing various services and activities in chemistry and its applications that benefit the community.

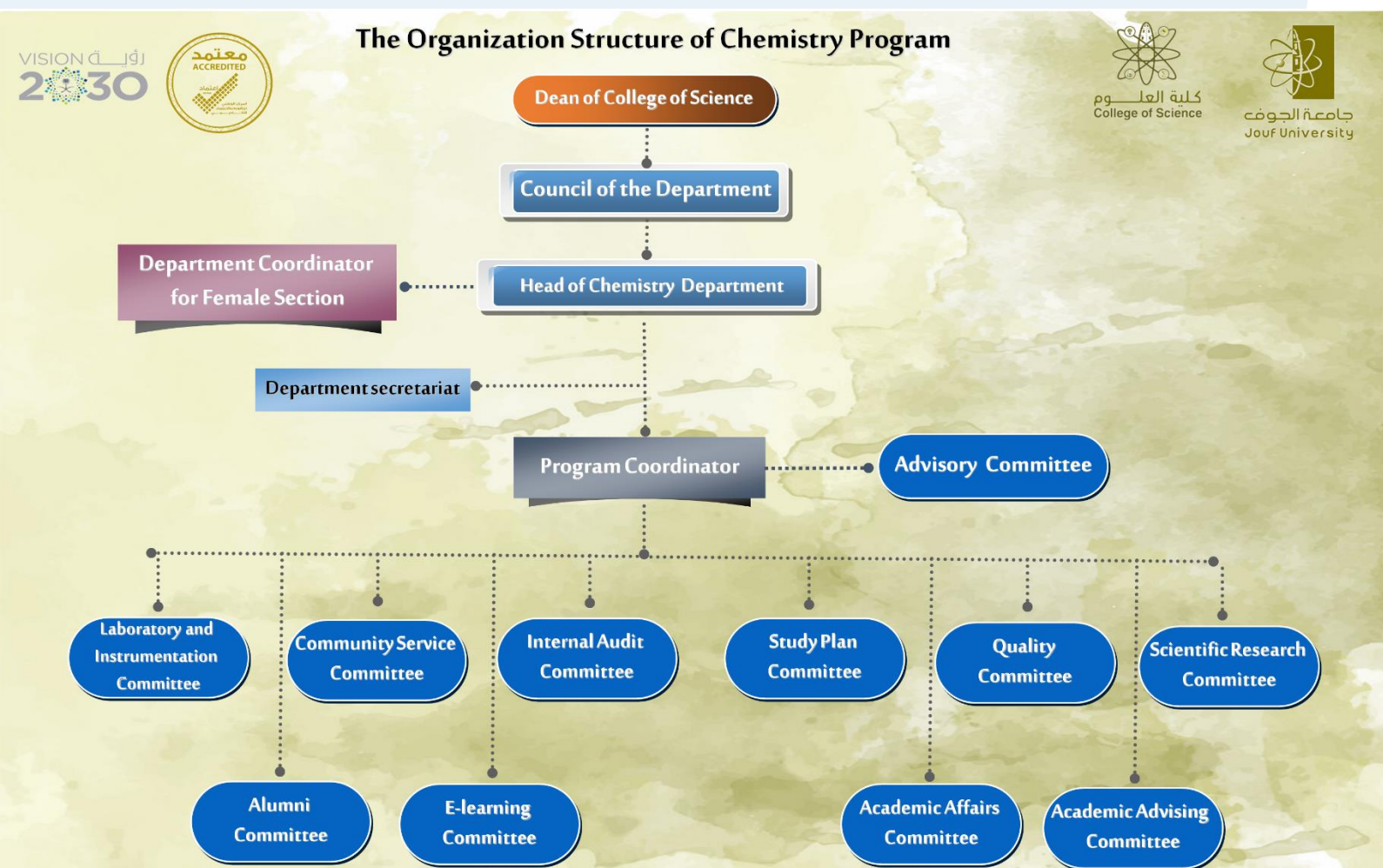
## 1.3. The mission of the Chemistry (Bachelor) program is reviewed as follows:

- The mission and objectives of the program are reviewed periodically (every five years) by the formed committee and the advisory committee.
- Examination and discussion of the formulation of the mission text in light of the cultural, economic and social variables that surround the university and society.
- Involving all the beneficiary sectors inside and outside the university (leaders - faculty members - administrators and technicians - employers)
- In discussing the recommendation to re-accredit the current message or to amend and re-accredit it.
- Republish and clarify the program's message to all sectors outside and inside the university
- Presenting the results and analysis of questionnaires and plans for improvement and enhancement periodically to the members of the committee formed to develop and review the mission and objectives, which include all beneficiaries of the program (leaders - faculty members - administrators and technicians - employers) as well as to the program's advisory board.



# **Chapter Two: Organization Structure of the Quality Management System**

## 2. 1. Organization structure of the program



## 2.2. Quality Management System in the program of chemistry

### 2.2.1. Department Council

Department council consists of assistant and associate professor in both campus (main & female) and is chaired by the head of the department. The department council is formed at the beginning of every academic year based on a decision by the president of University and recommendation of dean.

The department Council meets at least once a month, at the call of the chairperson, to study all critical issues of the department, set strategic directions, discuss regulations and operation guidelines, and decide on all academic as well as non-academic issues. The department Council also reviews the policies, practices, and procedures of the department. The department council meetings are conducted using video conferencing facilities since the faculty members of the female branch are council members.

The topics discussed by the department council are referred from the head department. According to department procedures, the minutes of meetings and decisions of department have to be endorsed by the department council's approval. The decisions of the permanent or temporary committees are not final unless approved by the department council.

The Council meeting is considered official only if one-third of the members attend the meeting. No decisions are taken unless they gain the absolute majority of votes among the members who are present. However, if there is a tie in the voting, the Chairperson will have the deciding vote.

### 2.2.2. Head of the department

- Hold the responsibility for leading the department with vision, creativity and excellence.
- Provides collaborative and collegial leadership for the department.
- Designs and implements the academic plan as it relates to the department.
- Develops, implements, promotes, and evaluates curriculum.
- Supervises the management, development, and evaluation of curriculum for the department.
- With the help of the faculty members, recruits, supervises, and evaluates full-time and adjunct department faculty and support staff.
- Promotes and fosters professional development activities related to academic leadership, classroom instruction, instructional technology, and support staff development.
- Develops and implements department budget and planning documents.
- Works with department faculty to coordinates student program activities.
- Ensures the vitality, currency, and academic excellence of the department programs.

## 2.2. Quality Management System in the program of chemistry

### ➤ Department Committees

#### I. Scientific research committee

- Guide to the Ethical Charter for the Professional.
- Accreditation of a research plan for the department according to the Deanship of Scientific Research and identifying the research priorities and funding sources of the plan.
- Accreditation of database of scientific research (published research, scientific thesis, participation in conferences, organizing conferences, scientific missions and scholarships, scholarships, Patents, excellence awards, scientific books, ...)
- Accredited mechanisms to encourage that the faculty staff of the program to do research. An annual report on the position of research integration within department and at the level of specialization locally, regionally and internationally, and the sources of funding for scientific research and citizen attributes and faculty of excellence in scientific research in the framework of the research plan of the College.

#### II. Academic advising committee

- Develop a plan for the academic supervision in the program.
- Supervise the progress of the academic guidance process according to the approved mechanisms in the program.
- Raising awareness among students about the nature of the unit and its importance and how to benefit from its services through meetings and publications at the website or blackboard system.
- Raising awareness of the importance of the academic guidance and the importance of communicating with the academic advisor by publishing brochures, publications and using the college or program website for this purpose
- In the first week of each semester, the Deanship of the College and the head of the department or coordinator of the program is organized the reception for new students to provide the comprehensive discussion about goals and mission of the college and its educational programs and its scientific groups, the fields of work of its graduates, importance of the university rules and regulations during their educational study and the necessary to contact with their academic advisor.
- At the beginning of each semester receive a list of the new students from the Deanship of the College and deliver to the program coordinator and distribute the students to the program staff for assigning.
- A meeting is held with the newly appointed faculty members to inform them about the system of study and the academic advising mechanism in the college based on program policies.
- Organizing a regular meeting with the advising coordinators to follow up the progress of the program guidance process.



## 2.2. Quality Management System in the program of chemistry

- Submit periodically (each mid semester) a report that includes the work of the committee and levels of students to the program and faculty administration.
- Analyzing the cases that transferred to the committee by the program and faculty administration, preparing reports and submitting them to stakeholders.
- Considering the problems of academic students raised by advisors and seeking to solve them with the program and faculty administration.
- Educating the spirit of honest competition for students, strengthen social relations with their colleagues, staff and their community, and arranging competitions monthly, semester and annually.
- Holding the sportive and cultural competitions among the students of the program to develop the spirit of competition among them.
- Developing a plan for the student activity in the program throughout the academic year and follow up its implementation.
- Carrying out cultural and social trips for students to develop their cultural and social awareness.
- Selecting the excellent students in cultural competitions and indoor sports; to represent the college in the various central competitions (sports, cultural) organized by the Deanship of Student Affairs at the university.
- Establishing the sport and recreational competitions among the staff of the program to find a kind of harmony between all staff of the program.
- Coordinating with the units and committees in the college each in its own right.
- Submitting a semester report on the activities of the unit to the Academic Affairs Supervisor of the College in order to submit it to the Dean of the College.
- Carrying out the work entrusted to the unit by the Dean of the College.
- Considering the complaints of students of academic nature and to find solutions that are suitable for them or to raise them to the program and faculty administration if necessary.
- Consider students' complaints about any course and find solutions and raise them to the program and college administration.
- Supervision of orientation programs for new students to introduce the system of study and exams in the program.
- The committee meets periodically (every 4 weeks) or as reports to discuss periodic reports or special reports from academic advisors at the program level. Carrying out the work assigned to the committee by the head of department and dean of the college. Coordinating with the Committee for estimating the numbers of new students expected to graduate and transferred from other faculties.

## 2.2. Quality Management System in the program of chemistry

### III. Quality Committee

Duties of this committee includes:

- Provide the requirements for quality and academic accreditation to all staff members in the program.
- Follow up the course specifications periodically according to the model of the National Center for Academic Accreditation and Evaluation and follow up on its upgrade.
- Prepare Program Specifications according to the model of the National Center for Academic Accreditation and Evaluation.
- Follow up on the periodic preparation of Course Report and review Annual Program Report according to the model of the National Center for Academic Accreditation and Evaluation.
- Develop the skills of staff members, administrators and students of the program.
- Create databases for each of the following members: Faculty members - Administrators  
Community service activities - Scientific research - Training courses.
- Follow up the preparation and implementation of plans in the program.
- Establish a system to follow up the alumni.
- Develop a system to ensure the continuity of quality management system.
- Evaluate the performance level in the program.
- Implementation and follow-up of the evaluation and academic accreditation.
- Provide the necessary facilities for the teams to supervise the application of quality assurance.

### IV. Advisory committee

- Discuss and evaluate the program's operational plan
- Study the alignment of the program objectives of and the requirements of the labor market
- Contribute to the formulation of effective specifications for the program graduate
- Discuss the annual variation of learning outcomes
- Discuss the annual report of the program
- Discuss the program specification
- Discuss improvement plans
- Discuss the performance indicators report and the improvement plans



## 2.2. Quality Management System in the program of chemistry

### V. Academic affairs committee

**General Objective:** carrying out the tasks entrusted to the Committee by the program's supervisor for Academic Affairs to follow up all the directives, circulars, transactions and decisions issued by the head of department or from the University administration and to ensure their implementation at the specified times.

- Coordination between the units of college and committees of the program in the transactions issued and incoming.
- Follow up all transactions that received by the committee after studying them and completing all aspects.
- Follow up the preparation of the educational and exams tables via coordination with the relevant committee of the program and the scientific department.
- Presenting the recommendations for students' disciplinary cases according to the disciplinary regulations at the university.
- Keeping a record of topics discussed for all students.
- The committee receives the deletions and additions to the students from the scientific departments after registering them on the system.
- The Committee meets the students' problems.
- Helping the graduate students to finish their graduation procedures, and assisting the students who are expected to graduate in registering the remaining courses and to submit their applications which the unit cannot achieve to the Deanship of Admission and Registration.
- Coordinating and organizing an archive of all the activities of the college and recording all the student issues that were discussed and the development of an index and a record of files and documents.
- Preparing periodic reports on the work of the committee and the need to increase its performance.
- Submitting a report in each semester for the activities of the committee to the academic affairs Supervisor.
- Carrying out the work entrusted to the committee by the Head of Department and the Dean of the College.

### VI. Study Plan Committee

- Supervising for preparation of the study plan and program in the department and reviewing them to ensure that they comply with the standards of the National Center for Academic Accreditation and Evaluation and according to the requirements of the lab our market.
- Supervising for development of the study plan of the program and follow up the recent versions of the standards of the National Center for Academic Accreditation and Evaluation and study the agreement of the current courses with them.



## 2.2. Quality Management System in the program of chemistry

- Preparing reports on the study plan and department program and submitting it to the deanship of the College for approval by the department and college councils.
- Coordination with the university Study Plans Committee to approve the plans.
- Conduct a survey on the compatibility between the requirements of the labor market and the specializations inside the program.
- Ensure that the course specifications are available and they comply with both the academic plans in the department and the standards of the National Center for Academic Accreditation and Evaluation.
- Follow-up with faculty members in the program and ensure that they distribute brief course specifications to students at the beginning of each semester.
- To inform faculty members in the program of any updates and developments on the study plans and courses specifications.
- To study the compatibility of the course's contents, teaching methods, courses objectives and the expected learning outcomes and the preparation of the relevant reports.
- List of books and references is needed by faculty members in the program and coordinate with the Central University Library to provide them according to the requirements of the department.
- Coordination with IT department to put the plans and specifications on the program's website.
- Contact with University Deanship for Educational Affairs at the end of each semester to coordinate and review the latest developments regarding the study plans and specifications and spread them to the faculty members in the program.
- Keep and save all the committee documents and provide a copy to the head of department and deanship of the college.
- Consideration of the subjects referred from the head of department to the committee and completion of related actions.

### VII. Internal audit Committee

Auditing and reviewing the following program documents:

- Program specification
- Courses specifications
- The final examination paper
- Courses reports
- The program learning outcomes
- Carry out the any tasks assigned to them by the head of the department



## 2.2. Quality Management System in the program of chemistry

### VIII. E-Learning Committee

- Improving the quality of education through the provision of additional teaching methods based on E-learning techniques.
- Developing the students' skills and their abilities to interact with the changes of the era through modern techniques.
- Follow up the activation of E-learning systems in all courses in the program.
- Raising the skills of faculty members of the program in E-learning systems.
- Servicing the educational and research processes in the program.
- Publishing the culture of E-learning through (seminars - workshops) in the program.

### IX. Community Service Committee

- Preparing the student talents in terms of culturally, socially, sportily, and artistically, and discovering and help them for development.
- Contributing in building the character of the student to achieve a balanced personality loving his country and leadership in culturally, socially, sportily, and artistically and directing.
- Discovering the talent students, developing them, refining them, and using their creative energies in whatever productive and useful.

### X. Alumni Committee

- Enhancing the communication and consolidating the principle of exchange of views and information between the graduations inside the program and graduates among themselves.
- Enhancing the loyalty of the graduates and their interaction and contributions for development of the Chemistry programs. Documentation of the database of graduates of the program in a special archive (paper and electronic).
- Constructing a website for the Alumni Association on the Internet (helps graduates of the college to know the news of the program as a whole, and the bulletin of the Chemistry Program Society, and the Alumni Guide).
- Establishing a database of institutions and partnerships related to graduates in the program.
- Measuring the level of satisfaction for graduates and business institutions.
- Opinions of graduates of the program collect through questionnaires filled electronically through the committee.
- Let know the graduate's aspect of academic news and research in the program.
- Documenting the relationship with the graduates to benefit from their experiences in developing academic, research and training plans.



## 2.2. Quality Management System in the program of chemistry

- Measuring the attitudes of business owners towards graduates of the program, and seeking to open the fields of labor market for the graduate.
- To know the requirements by taking opinions of companies for employment through questionnaires.
- Establishment of an annual day to which the graduates, institutions and companies that need to recruit for graduates of the program.
- Considering what the program management and deanship of the College refers to the subjects and the completion of the related issues.

### XI. Laboratory and instrumentation committee

- Preparation of studies for the requirements of the program about laboratories and supporting devices and software.
- Developing a general perception of the plants and their arrangement and their relationship with each other and the appropriate areas for each lab and the required spaces.
- Supervising the laboratory equipment with the college labs in coordination with the scientific departments.
- Preparation of presentations and specifications of equipment.
- Studying the offers submitted to the laboratories by the different companies.
- Follow up companies in the supply of scientific devices in coordination with the department.
- Ensuring that the specifications of the equipment required to be supplied to the laboratories before the completion of the purchase process.
- Follow-up with the relevant sections for the maintenance and operation of scientific devices.
- Ensuring that there is periodic maintenance of the laboratories, and replacing the damaged especially with the end of each semester.
- Follow-up of the devices and laboratories at the department on a regular basis.
- Working on the development plans for the development of laboratories in the department.
- Studying the needs of laboratories to engineers, technicians and assistants necessary to organize and processing the labs.
- Saving all papers related to the committee work, and providing a copy of them to the Head of Department and Dean of the College.
- Considering what the Head of Department and Dean of the College refers to the subjects and the completion of the related issues.

## 2.2. Quality Management System in the program of chemistry

### ❖ Academic Standard

Chemistry (Bachelor) program is adopting the national academic standard from the Education and Training Evaluation Commission.

### Program Accreditation Standards 2018 ([Appendix 1](#))

The National Center for Academic Accreditation and Evaluation recently reviewed and developed the programmatic standards, which will soon be used instead of the old ones.

The following are the key criteria:

- Standard 1:** Mission and goals
- Standard 2:** Program management and quality assurance
- Standard 3:** Teaching and learning
- Standard 4:** Students
- Standard 5:** Faculty members
- Standard 6:** Learning resource. Facilities, and equipment

### ❖ Continuous Improve Cycle

Continuous improvement is the act of continually looking to improve upon a process, product, or service through small incremental steps.

### Why Use a Continuous Improvement Process?

Implementing a Continuous Improvement Process in an organization should be standard practice now. Studies have shown the main benefits of a CIP are:

- Increase productivity
- Better teamwork and morale
- Greater agility
- Less waste
- More efficiency
- Increase customer satisfaction
- Increase in profit



# Chapter Three: Policy and Systems of Quality

## 3. Policy and Quality Systems

### 3-1 Quality Assurance Policies

Program of Chemistry quality policies are consistent with College of Science and Jouf University follows quality policies and the quality standards specified by the National Center for Academic Accreditation and Assessment (NCAAA). Our policy is to fulfill our mission which its first pillar in Providing advanced educational programs to prepare qualified technical contributors in chemistry science along with the college Objectives. Objective 1: Raising the quality of learning and excellence in disciplines of chemistry and to seek accreditation of national and international levels. Through specific projects as specified in the Program and college strategic plan.

### 3-2 Jouf university Policies

- I. Intellectual property rights protection policy at Al-Jouf University
- II. Intellectual property rights protection policy at Jouf University
- III. A policy of encouraging faculty members to actively participate in all research and scientific activities
- IV. Jouf University Academic Quality Assurance Policy
- V. Jouf University communication policy with graduates
- VI. Jouf University Council self-evaluation policy
- VII. Jouf University's Outstanding Performance Award Policy
- VIII. Monitoring the quality of teaching and learning at Jouf University
- IX. Policy for developing and creating academic programs and RASCI
- X. Policy of examinations and student evaluation
- XI. Policy of verifying the standards of achievement for students at Jouf University
- XII. Policy Stimulate And support for Jouf University employees to participate in community activities
- XIII. Professional and personal development policy
- XIV. Student retention policy and increased completion rates
- XV. The policy of attracting external beneficiaries to Jouf University
- XVI. The policy of rights and benefits related to providing advice and services to other sectors outside the university
- XVII. The university's support mechanism for faculty members to conduct joint research with external bodies and encourage graduate students to participate in research and scientific activities
- XVIII. University policies for marketing and commercial investment of innovations and scientific production for its employees
- XIX. University risk management policy
- XX. Workload policy

## 3. Policy and Quality Systems

### 3-3 Quality Assurance Management

Quality assurance processes involve participation of all college Departments, Units and committees. It is subjected to proper planning and continuous evaluation. where the performance metrics focus particularly on outcomes. Stakeholders (faculty, administration, students and employment institution) participation in planning and evaluation is a corner stone in the college development. Quality is assessed based on Key performance indication and internal and external benchmark ensure the continuous improvement and quality of educational and administration system in college. The College's quality process is based on the followings:

Presence of the quality unit which have an annual plan to support implementation of quality in all programs and units in collage, this unit is linked to Quality council in college to ensure its efficacy. It is also linked with the dean ship of Development and Quality in the university, which assess the quality of college and program through annual evaluation. Along with the presence of quality committee which ensures the quality of the educational and administrative part in the program. Participation of all beneficiaries (e.g. faculty, staff and students) in quality assurance processes. program of chemistry ensure that All faculty, administration, students are committed to all quality activities, in both planning and evaluation. Staff members participation in quality improvement and self- assessment process and decision making through:

- Preparing course portfolios which include – course specification, syllabus,
- report, student course evaluation survey, response to survey, grade report,
- sample of exams and sample of student activity.
- College Board Meeting
- Participating in program self-evaluation activities.
- Participating in different program and college committees
- All annual surveys distributed by quality unit which include program
- evaluation, evaluation of program administration, teaching and learning
- resources, IT, maintenance and job satisfaction survey.
- Participate in the advisory committee of the program.

Student participation in quality assurance and program decision making is encouraged by program administration through:

- Student committee (elected group of students of all year and levels) meet the dean and the advisory committee of the program at least once per semester to discuss problems encountered during their academic education. Each meeting has an action plan and report on it to resolve the encountered problems.
- They also have a group on what's Up, where they can discuss any urgent problems.



### 3. Policy and Quality Systems

- Student leaders are invited to share in the program board meeting and the collage council when issues regarding students' needs are discussed.
- Organization group on blackboard for communication between Collage administration and students.
- Quality unit annual surveys (Program evaluation, student experience, course evaluation, academic advising, student club, transportation, teaching and learning resources, IT and maintenance surveys).

Employee share in quality assurance and decision making through sharing in different committee such as quality unit, library, Internship committee and Alumni Unit. In-addition sharing in the annual surveys which include IT, maintenance and job satisfaction survey.

The college quality assurance system is subject to continuous evaluation and improvement. Through internal evaluation presented in quality unit annual report, program reports and development plans, assessment of beneficiaries through different surveys, independent opinion and self-evaluation study every five years.

#### 3-4 Tasks and Responsibilities of the Program Quality committee

##### A- Coordinator of academic programs

##### Organizational relationship:

The program coordinator is affiliated with the head of the program department.

##### Program coordinator tasks:

1. Participate in preparing the program and course descriptions according to the templates from National Center for Academic Accreditation and Assessment, and submit these descriptions to the (department board / reference committee) for review and accreditation; along with distributing the unified template to faculty members
2. Review the performance indicators (KPIs) of the program and make sure that they are approved by the department council / reference committee and work on collecting them annually and prepare the performance indicators report and recommendations for improvement.
3. Ensuring the preparation of reports of the program benchmarks comparisons report and recommendations for improvement. and improvement recommendations
4. Ensuring preparing report on different surveys related to the program and the necessary improvement recommendations
5. Collecting course reports following up their review with the relevant committees in the department and adopting them and submitting them to the department board.
6. Preparing program report and submit it to both department and college council for accreditation
7. Work on the compilation of reports of the decisions of the program and follow-up review with the relevant committees of the section and approved and submitted to the (Council of the Section / Committee of the Program Reference) and follow-up the preparation of the consolidated report for each decision.

### 3. Policy and Quality Systems

8. Keeping all developments and improvements resulting from the periodic review work through periodic program and decision reports in the program developments model (kept as evidence of the continued development of the program).
9. Ensuring follow-up to the implementation of improvement recommendations for both program and courses
10. Participating in preparing a self-study report for the program
11. Perform any other tasks within the scope of work.

#### Performance measurement and evaluation criteria

- The effectiveness of participation in preparing program and course specification and submitting them to Department Council for accreditation
- Accuracy and follow-up of staff members commitment to fulfilling course specification and reports
- Quality of reviewing the performance indicators reports (KPIS) for the program and follow up implementation improvement recommendations
- Quality and accuracy of benchmarking reports received from departments and transparency in preparing the benchmark report and follow up improvement recommendations implementation.
- Accurate follow-up improvement recommendations implementation from both program and course reports.
- The effectiveness of participation in preparing the self-study report.

#### B. Program Quality committee:

The program quality committee is formed by some members of staff members. This committee works to fulfill the learning outcomes of the program and ensure the implementation of quality standards issued by the National Center for Academic Accreditation and Assessment, as well as the program quality assurance system issued by the college and university. A committee shall be formed for each program that follows the department. The main tracks of the program should be represented in this committee.

#### General Organization:

The program quality committee is linked to department head.

### 3. Policy and Quality Systems

#### Program Quality committee task:

1. Reviewing the educational objectives and learning outcomes of the program in the light of the requirements of the benchmarking report of the plan, the labor market, the professional bodies, and what the University and the National Commission for Academic Accreditation and Assessment issued in coordination with the program reference committee and the plans committee in the program.
2. Adopting the means and tools of direct and indirect evaluation of decisions and programs.
3. Participate in the preparation of the scale of the evaluation of student work (Rubrics) for various decisions of the program and presented to the Council of the Department for review and accreditation and distribution to faculty members in the department.
4. Create an appropriate environment for implementation and successful management of quality assurance in the programs.
5. Participation in the preparation of the program description in accordance with the forms of the National Commission for Academic Accreditation and Assessment and submitted to the (program council for review and accreditation.
6. Participate in the preparation and review of the annual program report and its adoption by the board council and follow-up on the preparation of the consolidated report of the program and the process of obtaining it.
7. Participate in the preparation and review of the program performance indicators (KPIs) and their approval by the College Council and the preparation of the report of performance indicators and recommendations for improvement.
8. Participation in the preparation and review of benchmarking comparisons (Bench- marking) for the program and approved by the program and College Council.
9. Prepare a list of recommendations for improvement from the reports of the decisions and the program and submit them to the program and college Council section and follow up the adoption of these recommendations and notify the section of those recommendations
10. Participation in the preparation of self-study of the program (SSR) according to the models of the National Commission for Academic Accreditation and Assessment.
11. Perform any other tasks within the scope of work.
12. Ensure the involvement of all stakeholders in achieving the quality standards required by the university.
13. Ensure faculty members play an active role in quality management at the college and program level, especially with regard to improvement plan.
14. Receiving teams of different academic accreditation bodies from outside the university and quality committees from within the university.



### 3. Policy and Quality Systems

#### Performance measurement and evaluation criteria

- Accurate reviewing of the quality of program objectives and learning outcomes, their suitability and relevance to the program's mission and goals in light of the requirements of the labor market and professional bodies and what is issued by the university and NCAAA
- Effective follow-up of implementation of both direct and indirect evaluation measures.
- Accuracy of reviewing the quality and effectiveness of the student assessment (RUBRICS) for various courses and follow the results of those tools
- Accuracy of reviewing program specification according to NCAAA templates
- Accuracy in reviewing and approving the annual program reports of the department and submitting to the Accreditation Council
- Accuracy in preparing a list of improvement recommendations presented in course and program reports and submitting them to Department Council Department for accreditation and follow-up of its implementation
- Effectiveness of improvement recommendations follow-up and notify the department of these recommendations
- Effective participation in preparing self-study (SSR) according to the models of the NCAAA
- The effectiveness of participation in preparing and reviewing the performance indicators of the program (KPIS) and the speed of its submission to Department council for Accreditation
- The effectiveness of participation in preparing and reviewing the benchmarking comparisons (BENCHMARKING) of the program and the speed of submitting them to the department council for approval
- The quality, completeness and accuracy of the SSR review report.



# Chapter Four: Cycle of quality assurance

## 4. Cycle of quality assurance

### Program Quality Monitoring Procedures

The Chemistry program (CHM) at Jouf University has an extensive internal review and auditing mechanism in place. The main body overseeing this process is Program Quality Assurance Committee (PQAC). The various stages involved in the review and auditing process at CHM are summarized below.

#### 1. PQA Committee Approval Phase

In the first phase, the CHM Department Council discusses and finalizes the formation of the (PQA) Committee, its constituents, and its tasks. Once approved, the committee is notified and begins its work.

#### 2. PQA Planning and Task Distribution Phase

In this phase, the PQA committee meets under the supervision of its appointed head and discusses the planning and execution of the tasks appointed to it. In such meeting's the committee finalizes, among other things, the various review and auditing forms to be used, timelines of the audits and also distribution of tasks.

#### 3. Review and Correction Phase

This phase includes the following actions:

- Members of PQA carry out the review tasks assigned to them.
- The committee makes these reviews available to relevant personnel (faculty and staff whose work is being reviewed).
- The relevant personnel update their work incorporating suggestions of reviewers/auditors and upload the final version to a drive available to department members. **The auditing are performed according to various templates .**

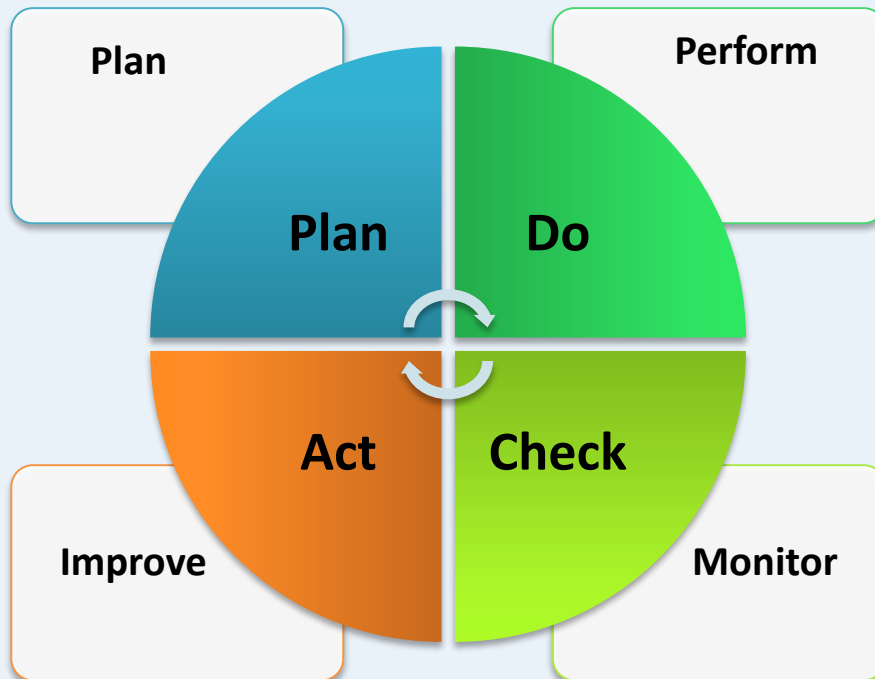
## 4. Cycle of quality assurance

Milestone	Week #1 (Term 1)	Week #2 (Term 1)	Week #12 (Term 1)	Week #13 (Term 1)	Week #1 (Term 2)	Week #2 (Term 2)	Week #12 (Term 2)	Week #13 (Term 2)	Week #1 (Term 3)	Week #2 (Term 3)	Week #6 (Term 3)	Week #12 (Term 3)	Week #13 (Term 3)	Week #14 (Term 3)	Week #15 (Term 3)
<b>Term 1</b>															
Program Specifications	■														
Course Specifications	■														
Course Specifications Review		■													
Course Reports			■	■											
Course Reports Review					■	■									
Course Evaluation Survey Analysis			■	■											
Course Files			■	■											
Course Files Review & Exam Review					■	■									
<b>Term 2</b>															
Course Specifications					■										
Course Specifications Review						■									
Course Reports							■	■							
Course Reports Review									■	■					
Course Evaluation Survey Analysis							■	■							
Course Files							■	■							
Course Files Review & Exam Review									■	■					
<b>Term 3</b>															
Course Specifications									■						
Course Specifications Review										■					
Conducting Program Surveys											■				
Course Reports												■	■		
Course Reports Review														■	■
Course Evaluation Survey Analysis												■	■		
Course Files												■	■		
Course Files Review & Exam Review														■	■

## 4. Cycle of quality assurance

Milestone	Evaluation Time
KPI's Analysis	At the end of the Academic Year
PLO's Analysis	
Annual Program Report	
Surveys Analysis Reports	
Independent Opinion (External Review)	Every 3 years
Self-study Report (SSR)	Every 3-5 years
Self-evaluation Scales (SES)	Every 3-5 years

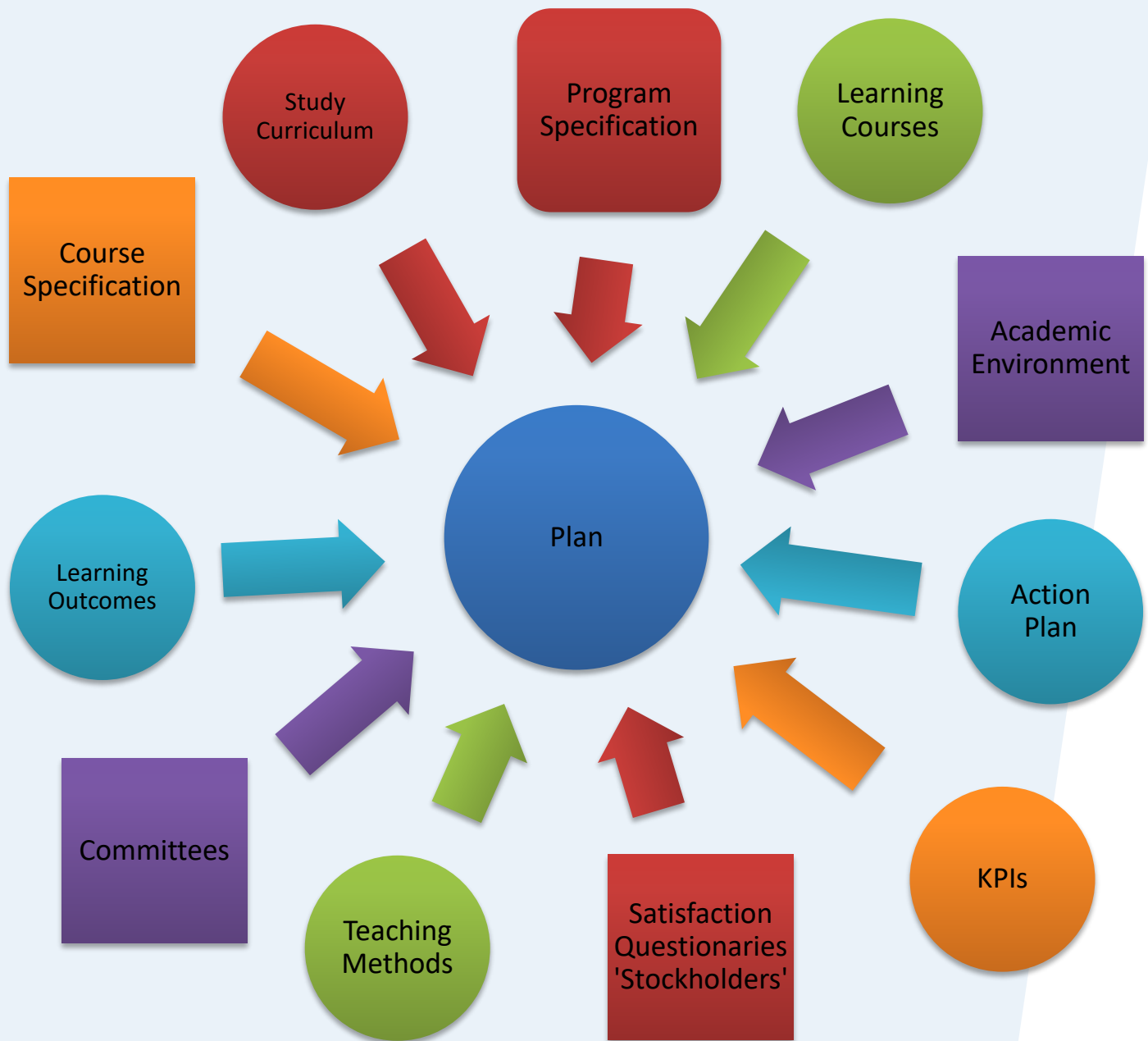
### Quality Cycle





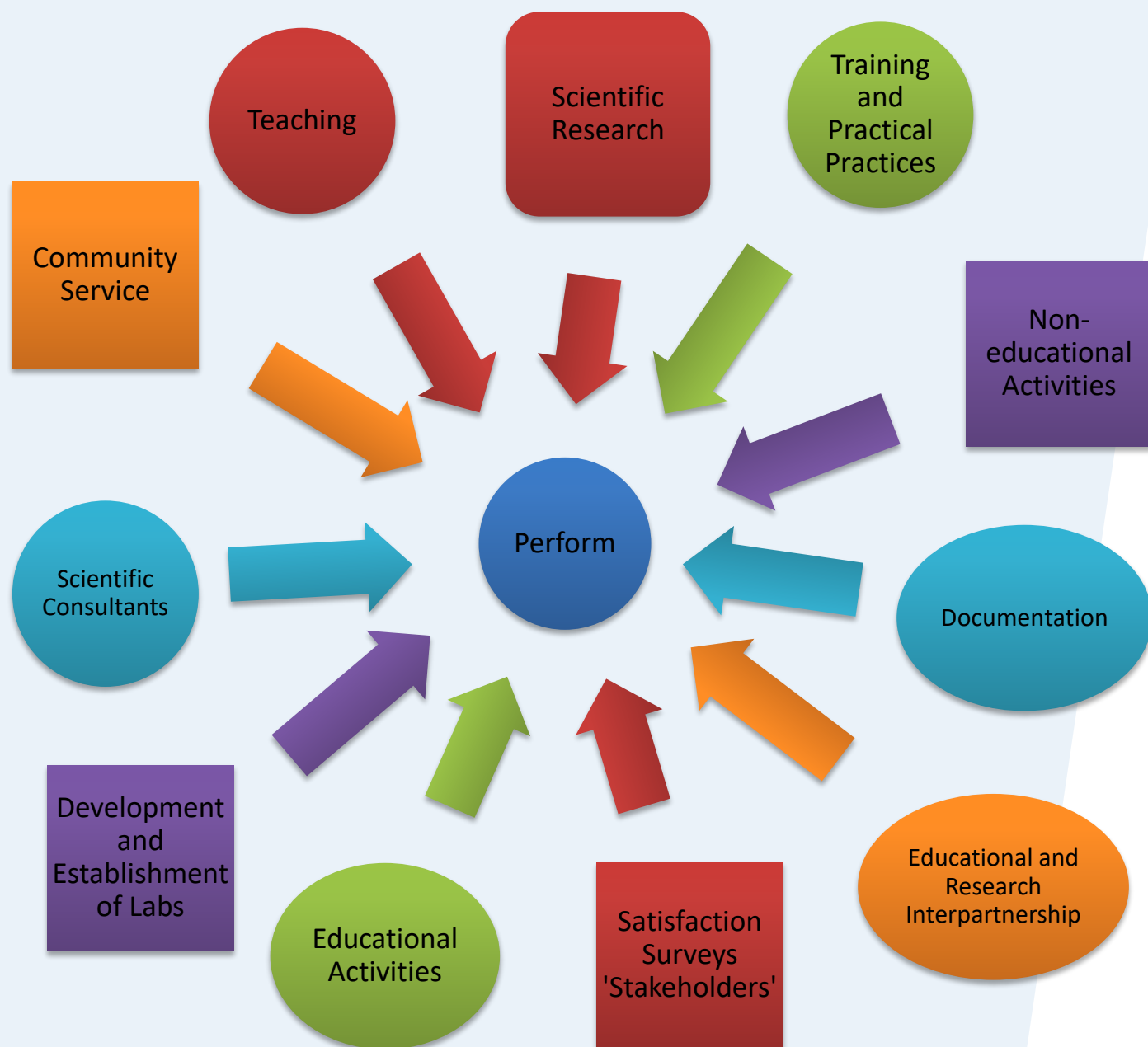
## 4. Cycle of quality assurance

### 1-Plan



## 4. Cycle of quality assurance

### 2-Perform



## 4. Cycle of quality assurance

### 3-Monitor



## 4. Cycle of quality assurance

### 4-Improve



## 4. Cycle of quality assurance

### Quality assurance activities of the Program

	Points	Used Tools	Elements	Responsible	Timing
Quality Evaluation	Course level	Course Report	<ul style="list-style-type: none"> <li>Student's results</li> <li>CES</li> <li>CLOs assessment</li> <li>Effectiveness of teaching</li> </ul>	Course Coordinators	End of the course
	Program Level	APR	<ul style="list-style-type: none"> <li>Course Reports</li> <li>7-Types of surveys</li> <li>Indicators</li> <li>Statistical Data</li> </ul>	Program Quality Committee and Advisory Committee	Annually
Quality Planning	Course level	Improvement actions	Based on course report	Course Coordinators	End of the course
	Program Level	Program wide action plan	Based on APR	Program Quality Committee	Annually
Quality implementation	Course level, program level and all functions are committed to implement the approved action plans				
Quality re-check	Course	Next course report	Evaluate results of action plans	Course Coordinators	End of the course
	Program level	Audit committee	Evaluate results of action plans	Program Quality Committee and Audit Committee	Annually

## 4. Cycle of quality assurance

### Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Effectiveness of teaching and assessment methods	Staff	Annual Survey	End of Academic Year
	Student Exam Results	Grade Distribution	End of each course
	Course Reports	CLOs Assessment	End of each course
	APR	PLOs Assessment	End of Academic Year
Assessment Methods	Staff	Annual Survey	End of each Academic Year
	Students	Survey (CES)	End of each Course
Learning Resources	Staff	Annual Survey	End of Academic Year
	Students	Survey (CES)	End of each course
Effectiveness of Leadership	Staff	Annual Survey	End of Academic Year
	Admin Staff	Annual Survey	End of Academic Year
Overall quality of the program	All aspects, PLOs, teaching/assessment, evaluation & improvement	Advisory committee recommendations	2-3 time (meetings)/year
Overall quality of the program	All aspects, teaching, surveys, review etc.	KPIs	End of Academic Year

## 4. Cycle of quality assurance

### Program Key Performance Indicator

No	KPIs Code/ PLOs	KPIs	Measurement Methods	Measurement Time
1	KPI-P-01	Percentage of achieved indicators of the program operational plan objectives.	By external evaluation	One academic year
2	KPI-P-02	Students' Evaluation of quality of learning experience in the program.	Survey	One academic year
3	KPI-P-03	Students' evaluation of the quality of the courses.	Survey	Each Semester
4	KPI-P-04	Completion rate.	Report provided by the Academic Affairs Unit	One academic year
5	KPI-P-05	First-year students retention rate.	Report provided by the Academic Affairs Unit	One academic year
6	KPI-P-06	Students' performance in the professional and/or national examinations.	By external evaluation (Survey)	One academic year
7	KPI-P-07	Graduates' employability and enrolment in postgraduate programs.	Alumni Survey	One academic year
8	KPI-P-08	Average number of students in the class.	Report provided by the Academic Affairs Unit	One academic year
9	KPI-P-09	Employers' evaluation of the program graduate's proficiency.	Survey	One academic year
10	KPI-P-10	Students' satisfaction with the offered services.	Survey	One academic year
11	KPI-P-11	Ratio of students to teaching staff.	Report provided by the Academic Affairs Unit	One academic year
12	KPI-P-12	Percentage of teaching staff distribution.	Report provided by the Academic Affairs Unit	One academic year
13	KPI-P-13	Proportion of teaching staff leaving the program.	Report provided by the Department Council	One academic year

## 4. Cycle of quality assurance

14	KPI-P-14	Percentage of publications of faculty members.	Report provided by Graduate Studies and Scientific Research Committee	One academic year
15	KPI-P-15	Rate of published research per faculty member.	Report provided by Graduate Studies and Scientific Research Committee	One academic year
16	KPI-P-16	Citations rate in refereed journals per faculty member.	Report provided by Graduate Studies and Scientific Research Committee	One academic year
17	KPI-P-17	Satisfaction of beneficiaries with the learning resources.	Survey	One academic year
18	KPI-P-18	Number of research groups in the program	Provided by Graduate Studies and Scientific Research Committee	One academic year
19	KPI-P-19	The number of funded research projects that the program's faculties obtain annually	Provided by Graduate Studies and Scientific Research Committee	One academic year
20	KPI-P-20	Percentage of students participating in extra-curricular activities	Extra-Curricular Activities Report	One academic year
21	KPI-P-21	Employers' satisfaction with the program's mission, vision and goals	Survey	One academic year
22	KPI-P-22	Percentage of students' graduation projects related to the surrounding community	Provided by Graduation projects Committee	One academic year





# Chapter Five: Program Quality Control System



## 5. Program Quality Control System

### 5.1. Program and Courses Specifications

#### 5.1.1. Program Specification

Program specification main objective is to provide platform for the planning, monitoring and improvement of the program by faculty members responsible for its delivery. It contains sufficient information to demonstrate that the program will meet the requirements of the Standards for Quality Assurance and Accreditation of Higher Education Programs, the SAQF, and specific requirements for Chemistry program professional accreditation.

The program specification prepared according to the template (T4) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>), which designed by NCAAA. The specification include general descriptive information about the bachelor of Chemistry program, mission, Goals, and program objectives, which are aligned with College of Sciences and Jouf University's mission and goals. It also contains the learning outcomes that should be acquired by the students and the methods of teaching and student assessment strategies (direct and indirect) for their achievement of learning outcomes in different domains of learning. Moreover, the program specification also include plans for ongoing evaluation of its effectiveness and planning processes for improvement.

#### 5.1.2. Course Specification

The course specification is prepared after approval of program specification and before a course delivery on the first time. Nevertheless, it can be subjected to modification according to the major or minor comments provided by internal and external auditors. The purpose of course specification is to make clear roadmap for the course as part of the package of arrangements courses to achieve the intended learning outcomes of the program. Course specification includes the course identification and general information, objectives, description, and topics to be deliver to the students. It also contains learning domains, and intended learning outcomes (ILOs) matching with that of the programs and are keeping with the National Qualifications Framework (NQF). Furthermore, course specification includes teaching strategies and the methods of assessment of the students for each ILOs. Course Coordinator in coordination with the course instructors will held the responsibility for preparation of course specifications according to the template (T4) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>), which designed by NCAAA and on the light of program specification. Course specification is use as reference for preparation course teaching plan.

## 5. Program Quality Control System

### 5.1.2.1 Course Teaching Plan

The Vice Rectorate for Educational Affairs at Jouf University requires the preparation of a course teaching, which will be uploaded along with course specification, and learning outcomes measurement plan to students at beginning of each semester through blackboard. The course plan will be prepared (T5) form ([https://www.ju.edu.sa/fileadmin/Vice\\_Rector\\_for\\_Educational\\_Affairs/%D8%A7%D9%84%D9%86%D9%85%D8%A7%D8%B0%D8%AC/%D9%86%D9%85%D8%A7%D8%B0%D8%AC\\_%D8%A7%D9%84%D8%AE%D8%B7%D8%B7\\_%D8%A7%D9%84%D8%B3%D9%86%D9%88%D9%8A%D8%A9/4.pdf](https://www.ju.edu.sa/fileadmin/Vice_Rector_for_Educational_Affairs/%D8%A7%D9%84%D9%86%D9%85%D8%A7%D8%B0%D8%AC/%D9%86%D9%85%D8%A7%D8%B0%D8%AC_%D8%A7%D9%84%D8%AE%D8%B7%D8%B7_%D8%A7%D9%84%D8%B3%D9%86%D9%88%D9%8A%D8%A9/4.pdf)), which contains:

- Course general information such as course name, code, credit hours, No. building and classroom, and date of lecture.
- Main references for the course
- Other Learning sources such as official scientific website or specialize journal website.
- Evaluation process, which include methods of evaluation, time (week and date), and marks distribution.
- Debarred: This contains No of absent hours that Debarred the student from attending the final test
- Course contents distribution per week
- Distribution of teacher office Hours: Usually 6 hours/week
- Finally, authorized signatures (course instructor, head of the department, and dean of the college).

## 5.2. Course and Program Reports

### 5.2.1. Course Report

By end of each semester, course instructor should prepare course report according to the template (T5) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>) and course coordinator will prepare report for its own division and gather reports from instructors to make a combined course report for all divisions. The course report include summary course general information of the course, analysis of students grades achievements and students of evaluation of the course. It also includes average of ILOS achieved by students compared with program ILOS target benchmark. Improvement plans are determined according ILOS score.

## 5. Program Quality Control System

### 5.2.2. Annual report of the program

The annual report of the program is prepared after the completion of the first and the second semester of the academic year, in which the progress of the graduated class within four years is shown and the number of graduates of male and female determined, and the percentage of employment for graduates in the government and private sectors are also presented.

Student achievement for the current academic year for all levels and it also contains a report of students' evaluation of the courses, in which an overview of the teaching and learning standard for self-study is presented, as well as the benchmark of learning outcomes for the next year for the course reports. It also presents in the program report the evaluation of performance indicators and improvement plans for them. After its completion, the course report for the program at the headquarters is combined with the Female branch to prepare a combined report.

Preparation of the annual report of the program according to the template (T6) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>) which designed by NCAAA.

### 5.3. Field experience specification and reports

Field experiences specification include ILOS required for the field of bachelor of nursing. Field experiences ILOS is transformation of knowledge covered in advance levels into practical skills. Field experience prepared according to the template (T8) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>). It will carry out in health setting in public under supervision of Chemistry specialists. Field experience will be evaluated by direct and indirect methods and results use for preparation of field experience report (see template t7) (<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/from/>).

### 5.4. Course Files

Course file or portfolio, contains evidences for conducted course and used for consideration in the review of the program. Course file is divided into 17 chapters and provide broad knowledge about what have been done in the course in previous semesters. Course file chapters include course outline, Professor's office hours, course approval document, course specification, course report, evidences of course spec to the students in beginning of the semester, copy of teaching materials, sample of assessment materials, copy of key answers, evaluation of the exam paper, question bank, full record of results for all assessments, report of course evaluation by the students, sample of students activities, sample multimedia, internal auditing report for course specification and course coordinator response. Every course instructor will submit the course file to program coordinator by the end of each semester. Then, program coordinator will deliver all courses files to the internal auditing committee for reviewing.

## 5. Program Quality Control System

### 5.5. Program's Key Performance Indicators

Key Performance Indicators (KPIs) are the key indicators of progress toward an intended result. KPIs provide a focus for strategic and operational improvement, create an analytical basis for decision-making, and focus on what matters most. It helps to measure what is intended to be measured to help inform better decision making. It also offers a comparison that gauges the degree of performance change over time. KPIs can track efficiency, effectiveness, quality, compliance, behaviors, project performance, personnel performance, and resource utilization.

Program of Chemistry, College of Science at Jouf University is committed to accomplishing the goals consistent with its stated vision and mission. Program KPIs provide the necessary quantifiable metrics to monitor progress in the department and are consistent with the University's mission.

Program of Chemistry prepares a report for KPIs measurements annually. There are seventeen KPIs scales for the program that are evaluated for students' activities and faculty roles in the department's academic development. These indicators are prepared in accordance with the fundamental plans and objectives of the University. For the evaluation of students and faculty, workshops, training, seminars, blackboard activities, and questionnaire responses are monitored to document the program activities. The scales of KPIs are calculated as a percentage, ratio, or value and compared with the previous performance report. These indicators are prepared to record the actual benchmark compared to the target benchmark, internal benchmark, and external benchmark (Majmaha University and the University of Jeddah). The target benchmark is set in response to the actual benchmark of the recent year, and the internal benchmark is the actual benchmark of the previous year. For each indicator, the strengths, weaknesses, and recommendations are described for the future improvement perspective. Suppose there is a minimal level of achievement for any indicator. In that case, an action plan is proposed with recommendations to improve that indicator to achieve the target set by the Internal and the External benchmark.

#### Institutional Key Performance Indicators

Standard	Code	Key Performance Indicators	Description
<b>-1- Mission, Vision and Strategic Planning</b>	KPI-P-01	Percentage of achieved indicators of the institution strategic plan objectives	Percentage of performance indicators of the strategic plan objectives of the institution that achieved the targeted annual level to the total number of indicators targeted for these objectives in the same year
<b>-2- Governance, Leadership, and Management</b>	KPI-P-02	Proportion of accredited programs	Proportion of programs with valid accreditation from approved accrediting bodies to the total number of programs in the institution

## Institutional Key Performance Indicators

Standard	Code	Key Performance Indicators	Description
<b>3- Teaching and Learning</b>	KPI-P-03	Students' evaluation of quality of learning experience in the programs	Average of overall rating of final year students for the quality of learning experience in the programs on a fivepoint scale in an annual survey
	KPI-P-04	First-year students retention rate	Percentage of first-year undergraduate students who continue at the institution the next year to the total number of first-year students in the same year
	KPI-P-05	Graduates' employability and enrolment in postgraduate programs	Percentage of graduates from undergraduate programs who within a year of graduation were: a. employed b. enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year
	KPI-P-06	Graduation rate for Undergraduate Students in the specified period	Percentage of undergraduate students who completed the programs during the specified period in each cohort
	KPI-P-07	Satisfaction of beneficiaries with learning resources	Average of beneficiaries' satisfaction rate with learning resources on a five point scale in an annual survey in terms of: a.Their adequacy and diversity (references, journals, databases... etc.) b.The support services provided for their utilization.
	KPI-P-08	Employers' evaluation of the institution graduates proficiency	Average of overall rating of employers for the proficiency of the institution graduates on a five-point scale in an annual survey
<b>-4- Students</b>	KPI-P-09	Annual expenditure rate per student	Average of annual operating expenditure per student (total operating expenditure - other than accommodation and student allowances - to the total number of students)
	KPI-P-10	Students' satisfaction with the offered services	Average of students' satisfaction rate with the various services offered by the institution (restaurants, transport, sports facilities, academic advising, ...) on a five-point scale in an annual survey.
<b>-5- Faculty and Staff</b>	KPI-P-11	Ratio of students to teaching staff	Ratio of the total number of students to the total number of full-time or full-time equivalent teaching staff - for the institution as a whole and for each program separately
	KPI-P-12	Proportion of faculty members with doctoral qualifications	Percentage of faculty members with verified doctoral qualifications to the total number of teaching staff at the level of: a.Institution b.Each branch
	KPI-P-13	Proportion of teaching staff leaving the institution	Percentage of teaching staff leaving the institution annually for reasons other than age retirement to the total number of teaching staff.

## Institutional Key Performance Indicators

Standard	Code	Key Performance Indicators	Description
<b>-6- Institutional Resources</b>	<b>KPI-P-14</b>	Percentage of self income of the institution	Percentage of self-income of the institution to the total income of the institution
	<b>KPI-P-15</b>	Satisfaction of beneficiaries with technical services	Average of beneficiaries' satisfaction rate with technical services...) on a five-point scale in an annual survey in terms of: a.Suitability. b.Safety and confidentiality. c.Availability and ease of access. d.Maintenance and support services.
<b>-7- Scientific Research and Innovation</b>	<b>KPI-P-16</b>	Percentage of publications of faculty members	Percentage of full-time faculty members who published at least one research during the year to total faculty members in the institution
<b>Standard</b>	<b>Code</b>	<b>Key Performance Indicators</b>	<b>Description</b>
	<b>KPI-P-17</b>	Rate of published research per faculty member	The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of fulltime or equivalent faculty members during the year)
	<b>KPI-I-18</b>	Citations rate in refereed journals per faculty member	The average number of citations in refereed journals from published research per faculty member in the institution (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published)
	<b>KPI-I-19</b>	Number of patents, innovations, and awards of excellence	Number of: a.Patents and innovations b.Awards of excellence obtained by the institution's staff annually
	<b>KPI-I-20</b>	Proportion of the budget dedicated to research	Proportion of the budget dedicated to research to the total budget of the institution
	<b>KPI-I-21</b>	Proportion of external funding for research	Proportion of research external funding to the total budget of research during year
<b>-8- Community Partnership</b>	<b>KPI-I-22</b>	Satisfaction of beneficiaries with the community services	Average of beneficiaries' satisfaction rate with the community services provided by the institution on a fivepoint scale in an annual survey
	<b>KPI-I-23</b>	Rate of community programs and initiatives	Average community programs and initiatives provided by each academic program during the year (total number of community programs and initiatives provided to total number of academic programs)



## Quality Systems in Chemistry Program

After PDCA continues improvement cycle we could say that Quality assurance in the educational system is continues process of planning and assessment to ensure reaching quality in the educational process. Emphasizing the quality of the educational process requires studying all aspects, activities and steps of the process and achieving quality in each. This requires the following:

- Clarity and transparency of all academic programs, providing clear and accurate information to internal and external (relevant) stakeholders.
- Defining clear and precise objectives for the academic programs offered by the College which must be consistent with the mission of these programs and which must be in accordance with the College's mission.
- Ensuring that the necessary conditions are met to achieve the objectives of the academic programs effectively and continue to maintain them.
- Ensuring that academic program learning outcomes are consistent with labor market requirements and meet community needs.
- Ensuring that academic programs meet the requirements of academic accreditation, whether these are required by the National Center for Academic Accreditation and Assessment (NCAAA) or by Dean Ship of quality and development
- Strengthening bridge of cooperation with the community, and improving the quality of services provided by the college to the community.
- Commitment of all faculty members and their involvement in quality assurance processes, and their active participation in all activities.
- **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 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.**



## Quality Systems in Chemistry Program

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
- 3- Permanent readiness to modify any plans to reach the target values through improvement plans and decisions

Therefore, the program relied on the scenario of hard work in the first year of the plan and expected slower growth in the coming years, and this appeared in the values of the three years 1440-1441, 1442 and 1443 H

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

### 5.6. Program's Self-study

A program self-study is a thorough examination of the quality of a program. The mission and objectives of the program and the extent to which they are to be being achieved thoroughly analyzed according to the standards for quality assurance and accreditation defined by the NCAAA. These standards are designed to support continuing quality improvement and to publicly recognize programs and institutions that meet required quality standards. The objective is to ensure good international standards in all programs offered in Saudi Arabia institutions. There are six standards evaluation scales have been determined for monitoring the quality assurance of the program. This document can also be used for planning, self- review, and support programmatic quality improvement strategies in higher education institutions.

This document provides Self-Evaluation Scales for programmatic quality assurance and academic accreditation standards, which include the following standards:

1. MISSION AND GOALS
2. PROGRAM MANAGEMENT AND QUALITY ASSURANCE
3. TEACHING AND LEARNING
4. STUDENTS
5. TEACHING STAFF
6. LEARNING RESOURCES, FACILITIES, AND EQUIPMENT

## Quality Systems in Chemistry Program

The quality assurance and continuous improvement of bachelor of chemistry program is based on the self-evaluation carried out by program various units and committees based on the quality performance criteria. The faculty and staff responsible for the various activities in the program evaluate the level of performance. These are carry out according to each scale criteria and based on suitable evidence and proofs, with the support of performance indicators and benchmark comparisons with other programs of high-quality performance, especially in areas of high importance. This self-evaluation is supported by independent opinion through an independent evaluator or evaluators from outside the institution; to enhance the credibility, objectivity and accuracy of the evaluation.

### ➤ References

Deanship of Quality and Academic Accreditation, Jouf University: website  
<https://www.ju.edu.sa/en/administrations/deanships/deanship-of-quality-academic-accreditation/home/>

Education and training Evaluation Commission, KSA: website  
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:Approved :Department council minutes	14 <sup>th</sup>
Date	1443 /6/ 20 هـ الموافق 2022/1 /23 م
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Signature	