

College of Pharmacy

Quality Management System (QMS)

PharmD Program

v 2023



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List of Abbreviations

KKU	: King Khalid University
QMS	: Quality Management System
NCAAA	: National Commission for Academic Accreditation and Assessment
COP	: College of Pharmacy
PharmD	: Doctor of Pharmacy
APPEs	: Advanced Pharmacy Practice Experiences
VD-FSA	: Vice Dean for Female Students Affairs
VD-RPS	: Vice Dean of Research and Postgraduate Studies
VD-ED	: The Vice Dean for Educational Affairs and Development
SSRp	: Self-Study Report
HRD	: Human Resource Development
APR	: Annual Program Report
HODs	: Head of the Departments
PCC	: Plans and Curricula Committee
PAC	: Program Advisory Committee
KPI	: Key performance Indicator
IP	: Intellectual property
NQF	: National Qualification Framework
NQF-KSA	: The National Qualification Framework for the Kingdom of Saudi Arabia
PPR	: Periodic Program Review
PLOs	: Program Learning Outcomes
CLOs	: Course learning Outcomes
DIOAR	: Design → Implement → Observe → Analyze → Revise
SPLE	: Saudi Pharmacist Licensure Examination
GA	: Graduate attributes
QA	: Quality Assurance
SES	: Self-Evaluation Scales

Overview

A quality management system is a mechanism for evaluating and measuring an institution's commitments and performance, described in its mission and vision and reflected in the institution's strategic direction. The College of Pharmacy at KKU is committed to providing quality education and fulfilling the promises outlined in its Mission and Vision. The **QMS (quality management system)** handbook of the college of pharmacy is organized as follows. **Chapter 1** reviews the history and background of the college of pharmacy at King Khalid University. **Chapter 2** reviews the quality management system, specifically the quality assurance committee, and its functions in the college of pharmacy. **Chapter 3** outlines the committee structures and their duties and responsibilities at the university and college levels. **Chapter 4** discusses the National Qualifications Framework for Saudi Arabia (NQF-KSA) for higher education, including learning domains, NQF level descriptions, determination of credit hours, and total credit hours required for the qualifications. **Chapter 5** reviews academic program development, including program planning and design, major and minor changes, program and course annual monitoring and reporting, periodic program review, assessment principles, involvement of stakeholders in the review process, and course file review by the quality assurance committee. **Chapter 6** provides the details of the NCAAA (National Commission for Academic Accreditation and Assessment) requirements, such as NCAAA standards, NCAAA evaluation scale of the standards and criteria, program self-study report (SSRp), program eligibility criteria, program accreditation steps, program key performance indicator (KPIs), benchmarking, and provide quality improvement initiatives for future development.

Message from the Dean

I am delighted to introduce the updated edition of the quality management system handbook of the College of Pharmacy (COP), King Khalid University. The college has a vision of becoming a renowned institution for pharmacy education and research, and to make that a reality, it underwent significant changes to its processes, units, and committees. These changes were only possible with the implementation of clear quality standards and guidelines. The updated handbook reflects these changes and offers a complete overview of the current procedures and systems related to developing, maintaining, implementing, and evaluating quality assurance and improvement processes at COP. It also provides a detailed description of the quality management process at the college. Quality is a collective effort and all the successes so far and to come are the result of the hard work and collaboration of all members of the college at every level. I am deeply grateful for this. I would like to give special recognition to the Vice Deanship for Educational Affairs and Development and the quality team for their tireless effort and dedication that led to the creation of this informative guide.

Yahya I. Asiri, BPharm, PhD

Dean

College of Pharmacy, King Khalid University

Abha, Kingdom of Saudi Arabia

Message from the Vice Dean for Educational Affairs and Development

The Vice Deanship for Educational Affairs and Development has updated the second edition of the quality management system (QMS) manual, with the overarching concept of continual improvement at its core. The QMS is made up of numerous activities in which the College of Pharmacy (COP) establishes its vision, mission, and objectives, as well as the processes to be implemented, resources, and needs requiring to attain the best practice outcomes. It also controls the quality management system by defining specific mechanisms for measurement, procedures, control techniques, action, and implementation. The QMS described in this handbook specifies the numerous policies and procedures that ensure quality assurance and management activities are executed and assessed per NCAAA standards. It specifies the responsibilities, scope, and domain of various activities. To summarize, I am optimistic that the QMS will guide COP toward high ethical behaviors, quality commitment, and excellence.

Taha Yahya Alqahtani, BPharm, MSc, PhD

Vice Dean for Educational Affairs and Development

College of Pharmacy, King Khalid University

Abha, Kingdom of Saudi Arabia

Chapter 1: College of Pharmacy

1.1. History and Background

The College of Pharmacy (COP) is a part of the University's Health Colleges System, along with the other health colleges including the Colleges of Medicine, Dentistry, and Applied Medical Sciences (at Abha and Khamis Mushait). The COP at KKU was established in 2003 in Abha. It is a higher education institution that offers undergraduate and graduate programs in pharmacy. The college is committed to providing students with a high-quality education that prepares them for pharmaceutical industry, academia, and healthcare careers.

The College of Pharmacy at KKU offers a 6-year Doctor of Pharmacy (PharmD) program. The program is designed to provide students with the knowledge and skills necessary to become successful pharmacists. The PharmD program is a professional level degree, covering pharmaceutical sciences with a focus on the clinical aspects that will allow graduates to work in hospitals with the medical team. The Pharmacy Training Program, or so-called Advanced Pharmacy Practice Experiences (APPEs), has been designed to provide students with various experiences in clinical pharmacy areas, including hospitals/institutions, community pharmacies, ambulatory care, or acute care/internal medicine.

The PharmD program at College of Pharmacy in KKU is committed to the vision set by its leadership to achieve the overall vision of the university, as well as of the KSA vision 2030. The PharmD program administration has created a conducive academic environment wherein pharmacy education, training, and research are emphasized concurrently. The COP at KKU has been the main venue of the pharmacy profession in the Southern Region, and has produced more than 1400 competent pharmacists who are significantly contributing to the establishment and advancement of the pharmacy profession in the region and the country.

1.2. College Governance and Administration:

The COP is a well-structured hierarchical organization. College governance refers to the system of decision-making and management of a college or university. This can include the administration, faculty, staff, and students. Administration refers to the group of individuals

responsible for managing the day-to-day operations of the college or university. This can include the president, provost, and other senior administrators. The administrative team of the College of Pharmacy includes the Dean, the College Council, the Vice Dean for Educational Affairs and Development (VD-ED), the Vice Dean for Female Students Affairs (VD-FSA), and the Vice Dean of Research and Postgraduate Studies (VD-RPS). Overall, the college has the following organizational structure showing in Figure 1.

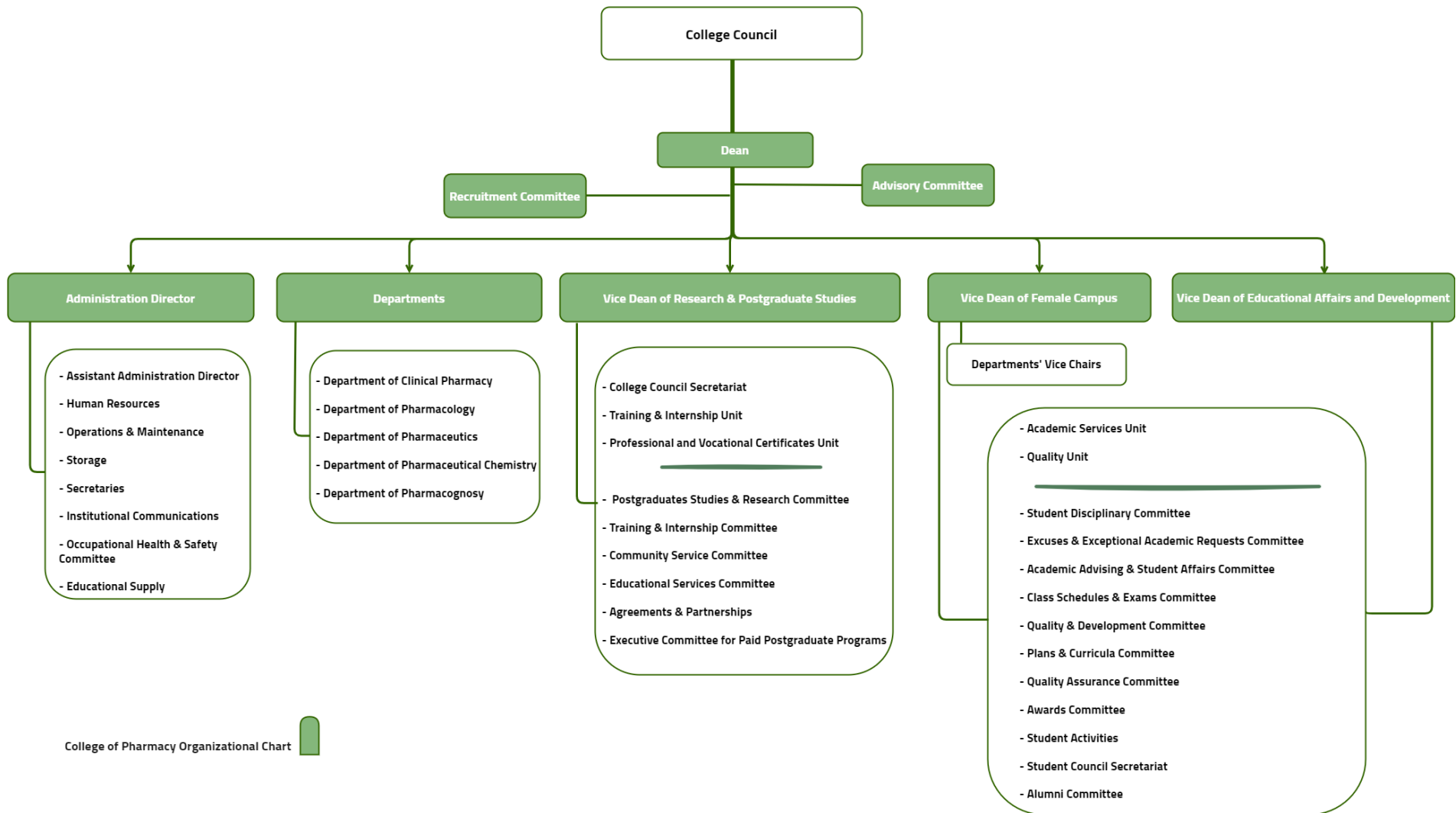


Figure 1: College of Pharmacy organisational chart

1.3. Departments in College of Pharmacy:

The College of Pharmacy currently comprises of five academic departments:

1. Clinical Pharmacy
2. Pharmaceutics
3. Pharmacology
4. Pharmaceutical Chemistry
5. Pharmacognosy

1.4. Mission and Goals/Vision of the College and the Program:

1.4.1. College of Pharmacy Vision:

To accomplish national and international recognition for excellence and innovation in pharmacy education, scientific research, and community service.

1.4.2. College of Pharmacy Mission:

Graduating pharmacists capable of playing an effective and efficient role within the health care professional team to serve the community through direct patient care, scientific research and community engagement.

1.4.3. College of Pharmacy Goals:

1. Improve the quality of pharmacy education and practice.
2. Recruit, develop, and retain distinguished faculty members to improve education and research.
3. Promote educational environment and cooperation among pharmacy and other health care disciplines.
4. Accommodate with the organization administrative processes and measures to provide support to the academic programs.
5. Encourage high impact scientific research, postgraduate education, and enrich resources.
6. Provide high quality continuous pharmacy education and excellent pharmaceutical services to the community.

1.4.4. PharmD Program Mission:

Provide a professional education that prepares students with competencies and skills to practice effectively in a wide variety of existing and future roles in patient-centered care, research and community services.

1.4.5. PharmD Program Goals:

1. Graduate medication therapy experts with knowledge, skills and values to meet health care and professional market requirements.
2. Provide competent students in pharmacy profession capable of effectively participating in foundational scientific research in the fields of pharmacy practice and pharmaceutical sciences.
3. Foster values and skills of the graduates that promote collaborations with other health care providers to enhance community services and public health awareness.

1.5. Stakeholders:

The stakeholders for the College of Pharmacy and PharmD program as follows:

A) Internal stakeholders include:

- I. Teaching staff, where they are asked to prepare course reports and review the program using self-evaluation scales. In addition, several surveys are conducted to ascertain their feedback about the various aspects of the program.
- II. Students are asked to rate the quality of the teaching and learning process through: Course and Program Evaluation Survey. Other surveys like course evaluation survey and program experience survey.
- III. COP graduates are asked to rate the quality of their program and it is captured through Alumni Survey.

B) The external stakeholders include:

- I. Employers of COP graduates.

- II. Program directors of COP graduates who are pursuing postgraduate studies (demonstrators/ lectures).
- III. External Advisory Board.

1.6. Teaching and Learning Strategies:

Teaching and learning strategies in the COP at KKU should encourage skills development and therefore support graduate's employability. The teaching and learning strategies should be based on the following theories:

1.6.1 Adult learning models and principles, e.g., Knowles' andragogy, considering individual differences and the learning situation. The core adult learning principles according to Knowles's andragogy are as follow:

- ❖ The learner needs to know how the learning will be conducted, what learning will occur, and why that learning is valuable.
- ❖ Building personal autonomy in adult learners and assisting them to shift towards better self-direction.
- ❖ Prior experiences of the learner can greatly affect the learning process of the adult learner.
- ❖ Readiness to learn is encourages by life situations that generate a necessity to know, and the need for direction and support in the learning process.
- ❖ Adult learners' orientation to learning is generally problem solving over subject-centered learning, and the learning is facilitated by presenting the information in a real-life context.
- ❖ Adult learners generally become more motivated in learning that results in internal need satisfaction or helps them solve problems in their lives.

1.6.2. Learning taxonomies

Learning taxonomies, Bloom's taxonomy as an example, are known to explain different types of learning behaviours. They are typically used to describe and differentiate between different levels of learning development. They are useful tools that assist in designing course curriculum, teaching methods and assessments. **Bloom's taxonomy** classifies **(Figure 2)** cognitive

skills into six levels ranging from lower-order skills that involve less cognitive processing to higher-order skills that require deeper learning and a greater level of cognitive processing.

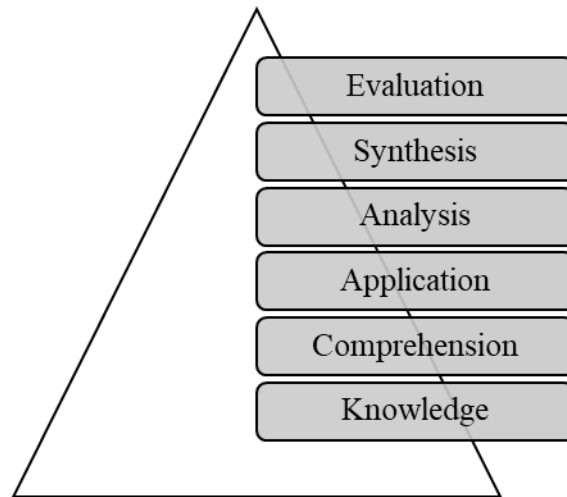


Figure 2: Bloom's Taxonomy

1.6.3. Miller's Pyramid

Miller's pyramid is a framework that classifies clinical skills, competence, and performance. In other words, it distinguishes knowledge at the lower levels and action in the higher levels (**Figure 3**). The first level of Miller's pyramid (Knows) represents the knowledge that might be applied in the future career of the student to demonstrate competence. Examples of assessment methods that could be used to assess this level include essays, oral examinations and multiple-choice questions. The second level of Miller's pyramid (Knows how) represents context-based tests that require the use of both knowledge and skills. The next hierarchical level Shows How. Assessment methods used to meet an outcome at this level require a pharmacy student or trainee to be able to demonstrate that they can perform in both a simulated environment and in real life, for instance, objective structured clinical examinations (OSCEs) and simulated patient assessments. The top level of Miller's hierarchy, Does, corresponds with assessment methods that enable the examination in context of the student's ability to demonstrate the outcomes in a complex and everyday situation repeatedly and reliably. OSCEs and observing trainees are two examples of the assessment procedures that could be used to assess an outcome at the final level of Miller's pyramid.

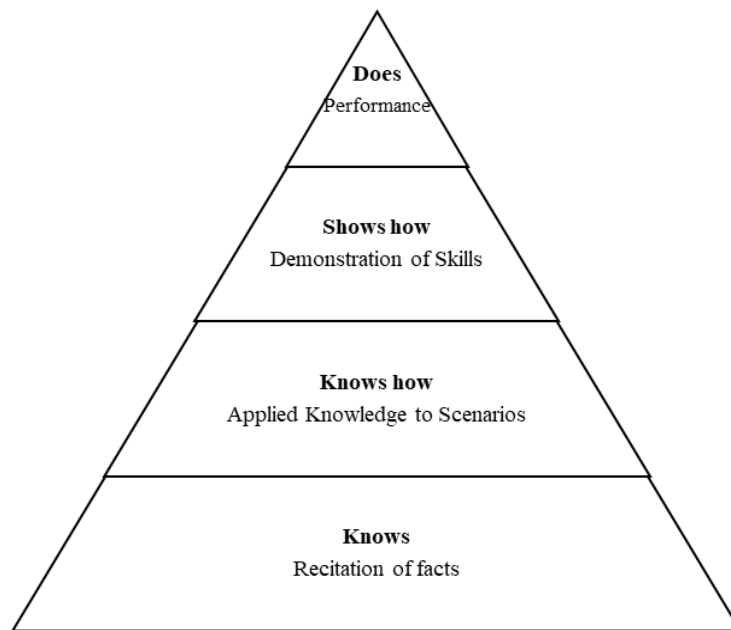


Figure 3: Miller's Pyramid

Courses contents and teaching and learning methodologies at the COP are updated regularly based on two indicators including student feedback in end of term “course evaluation survey” and analyzing the student’s assessments data. Findings from these indicators are then fed into an action plan for course improvement which is drafted in the course report by the course coordinator. Action plans for each course are then discussed and approved in the department quality and development committee and then sent to the college quality committee for feedback and approval. Closing the loop can then be achieved by updating the course content and/or updating the teaching and learning methodologies and strategies (**Figure 4**). To evaluate the teaching strategies, data from student feedback in the course evaluation survey are analyzed and used as a KPI-P-06 to measure student satisfaction across both male and female sections regarding the effectiveness of teaching methods.

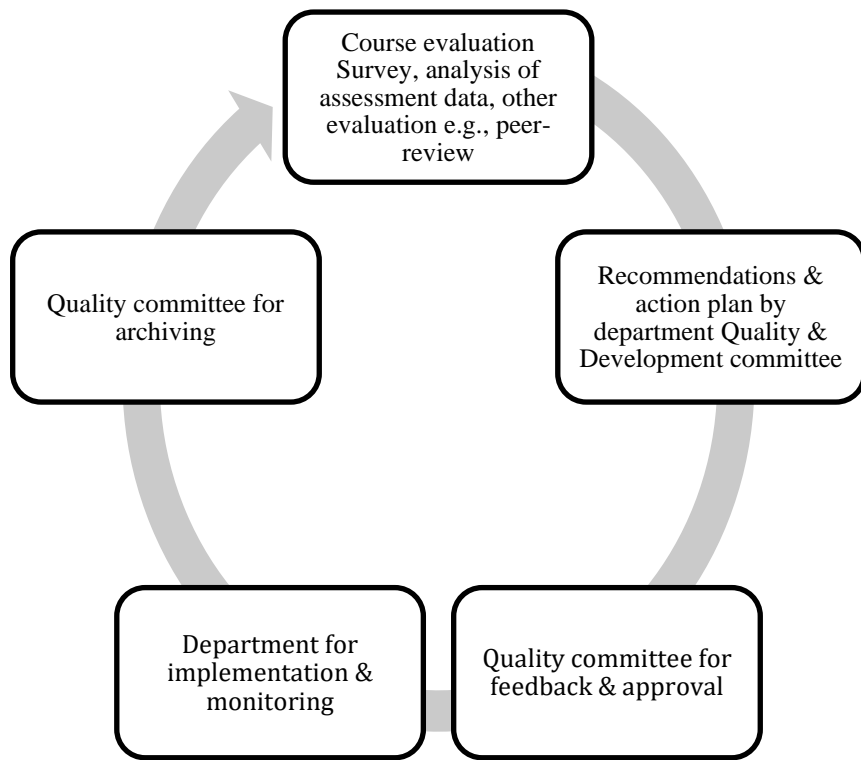


Figure 4: Flow Chart for Updating Teaching and Learning Strategy

Chapter 2: Quality Management System (QMS)

Quality is an extent to which the customers or users believe the product or service surpasses their needs and expectations. Quality of education, for example, is the skill of building the abilities of assimilating the knowledge in the area of educational needs and the implementation of this knowledge to creating mechanisms allowing fulfilling expectations of customers and educational services. The care about the quality of education by the universities is one of the basic process, which creates the present market of educational services. The quality of education becomes the basis to working out and implementing the strategy for the development of educational units. Quality management means the systematic development and maintenance of quality. As a methodological entity, the quality system refers to quality management methods.

The quality management system includes the methods for continuous improvement of education, research, management, leadership, and supporting services. More and more requirements put for the higher education, especially from the point of view of the demand on the job market, caused the necessity of implementing the quality management systems (QMS) compatible with the ISO 9001: 2008 standard to universities. King Khalid University aims to continuously improve the quality of all its operations by a formalized system assuring the fulfilment of the academic standards.

This QMS conforms to NCAAA Standard 2 requirement: Program Management and Quality Assurance. The QMS Manual contains organizational information, quality policy, objectives, and methodologies to achieve compliance with NCAAA standards.

2.1. Quality Assurance – An Overview

Quality assurance is primarily an internal responsibility system in an institution, and it depends heavily on the commitment and support of all those who involve in administration, management, and teaching. The procedures and standards outlined by NCAAA are based on the expectation that institutions would adopt, this includes responsibility system and appropriate actions to ensure that high quality criteria are achieved. The current document is intended to guide and support those processes. Due to the importance of the higher education system for

students, their families, and the wider community, one cannot simply assume that quality can be achieved. Quality must be verified by independent processes in order to guarantee to everyone concerned that high levels of quality are being accomplished. The NCAAA accreditation processes for higher education institutions and the programs provide this verification.

2.2. Significance of Quality Assurance

Quality assurance is both a process and a framework defined for achieving excellence. The process guides to achieve the institutional mission and vision and accomplish goals and objectives of institution. The main objective of the quality assurance is to guide various constituents in performing their activities at an optimal level. These constituencies include administration, faculty members, students, support service staff and physical resources including buildings, classroom environment. Continuous evaluation will help any educational institution in rectifying weaknesses and attaining high quality in all areas. The college/ department will be aligned with changes in academic and job market requirements and adapt accordingly to provide the highest quality education to students. Based on its endeavor to ensure having a distinguished status at the regional, national and international levels, College of Pharmacy is striving to implement quality systems and processes in all its units.

2.3. Accreditation and Quality Assurance

Quality assurance is a continuous, ongoing process of monitoring outcomes and ensuring quality in all university endeavors. If such a process is done properly, institutions will constantly evolve and adapt to environmental changes and social needs. Accreditation is mainly based on the evaluation at a specific period of time, highlighting institutional quality and outcomes that demonstrate alignment of purpose with performance. As such, quality assurance can be considered as a prerequisite for accreditation. Accreditation process, at the institutional or program level, involves evaluation by an international or national agencies NCAAA for Saudi Arabia based upon a set of agreed standards. If the standards are met, accreditation is granted. It is worth mentioning that being accredited indicates that the institution and its programs are up to international standards, and it is essential to maintain such quality standards as part of the institution's ongoing and long-term performance improvement. Thus, it is unlikely that

accreditation can be completely granted unless providing evidence that further steps to maintain the effectiveness and the quality of its programs through continual evaluation and assessment are provided.

2.4. Processes in Program Quality Assurance

College of Pharmacy believes that proper designing, implementing and continuous assessment and improvement of all its departments and activities can guarantee high quality output. For this reason, it has recommended general guidelines and procedures in the form of quality practices in order to ensure that good practices of all sections follow the requirements of NCAAA quality expectation. The **Figure 5** below shows that the quality assurance processes follow a continuous loop.



Figure 5: Program Quality Assurance Cycle

2.5. General Requirements

With the consultation of department Council and the college council will create, document, implement, and maintain the QMS and will continue to improve its effectiveness in line with the NCAAA requirements, stakeholders' satisfaction and department strategic plan. The vice deanship of educational affairs and development will:

- ❖ Determine process sequence and related processes.
- ❖ Determine criteria, operational mechanism and effective process control.
- ❖ Ensure adequate resources and accurate data to support process excellence and process monitoring.

- ❖ Monitor, measure and analyze process achievement or KPIs achievement.
- ❖ Execute opportunities for improvements, preventive and corrective control and continuous process improvement.
- ❖ All major processes will be managed by the vice deanship of educational affairs and development in accordance with College Council, University Council regulations with NCAAA requirements.
- ❖ In case external resources or services are required, the vice deanship of educational affairs and development will ensure these external resources meet NCAAA and QMS requirements. Department Council will identify the units, divisions or colleges that require external resources.

The vice deanship of educational affairs and development will document the QMS for top management to ensure that it meets the QMS Document Structure (**Figure 6**).



Figure 6: Program QMS documentation structure

QMS is being created to ensure a good quality management system developed and implemented to guide NCAAA and Program Vision, strategic plan and action plan implementation based on quality policy and objectives.

2.6. NCAAA Quality Planning and Review Cycle

NCAAA quality planning and review cycle shows in the following **Figure 7**.

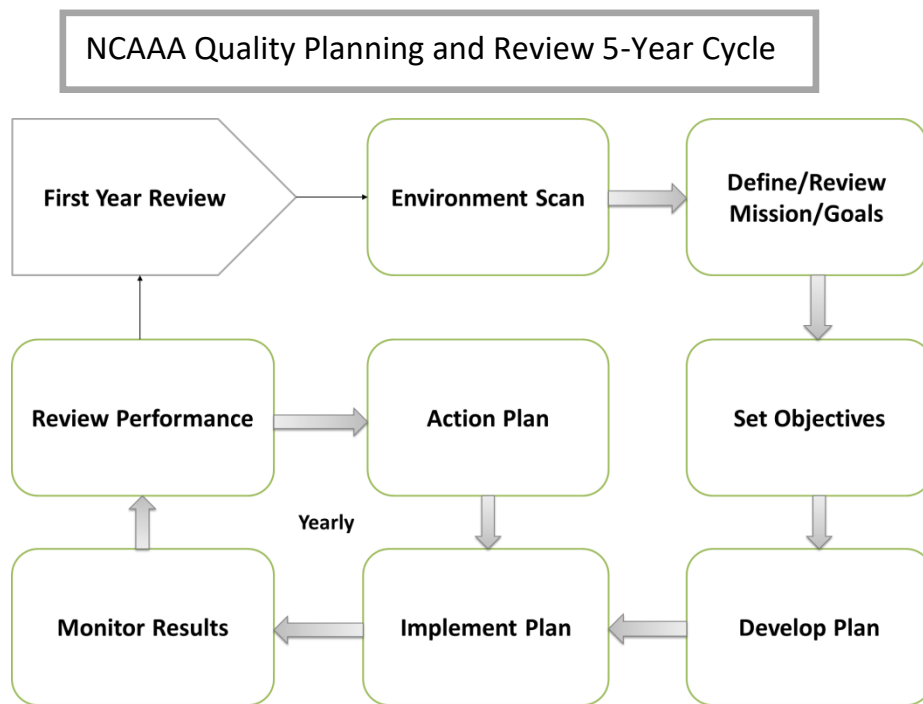


Figure 7: NCAAA quality planning and review cycle

2.7. Quality Manual

Program quality manual is the main document to explain the policy and planning by top management. The quality manual is the main source of reference other than NCAAA and Program and College Vision documents. The quality manual has following scope:

- ❖ Scope of implementation for QMS.
- ❖ Quality policy and quality objectives of program.
- ❖ Not-applicable to NCAAA requirements (Need to be modified as per NCAAA latest modifications if any).
- ❖ Reference to procedures and other support documents.
- ❖ Process map in the QMS.

2.8. Quality Practices

Required Procedures:

1. Document Control.
2. Control of Records.
3. Self-Study or Internal Audit.
4. Risk Management.
5. Improvement Initiatives.

Management Supporting Procedures:

1. Self-Study Report (SSRp).
2. Human Resource Development (HRD).
3. Stakeholders' feedback (survey and action plans).
4. QMS monitoring.

Major processes for effective QMS implementation, have been listed in **Table 1**.

Table 1: Major processes for effective QMS implementation

S.No.	Name of the Activity	Every Semester	Annually	Every 5 Years	Responsibilities	Stakeholders Involved
1	Program's Mission, Vision, Goals, Objective and Learning Outcome preparation and review			✓	College board/College's Committees /Program Advisory Committee	Students, Staff, Employers, NQF, Advisory Committee
2	Program Specification Review			✓	VD-ED	Staff
3	Course Report	✓			Course Coordinator	Staff
4	Course Recommendation Reporting	✓	✓		Plans and Curricula Committee	Staff
5	Course File Preparation and Submission	✓			Course Coordinator	Staff
6	Program KPI Report Preparations and		✓		Quality Assurance	Staff

	Analysis				Committee	
7	Annual Program Report		✓		Quality Assurance Committee	Staff
8	Program Assessment, Recommendations and Conclusion		✓		Quality Assurance Committee	Staff and Advisory Committee
9	Program Review and Evaluation (SWOT Analysis)			✓	VD-ED	Staff and Advisory Committee
10	Program Self Study Report Development			✓	SSRp Committee	Staff
11	Course Evaluation Survey	✓			Measurement and Assessment Unit/Quality Assurance Committee	Students
12	University Experience Survey (Mid-Level Students)		✓		Measurement and Assessment Unit/Quality Assurance Committee	Students
13	Program Evaluation Survey (Final Level Survey)		✓		-Measurement and Assessment Unit/Quality Assurance Committee	Students
14	Exit Student Survey for Student Attributes		✓		Measurement and Assessment Unit/Quality Assurance Committee	Students
15	Employer Survey for Student Attributes		✓		Measurement and Assessment Unit/Quality Assurance Committee	Employers
16	Alumni Surveys for Student Attributes		✓		Measurement and Assessment Unit/Quality	Program Alumni

					Assurance Committee	
17	Employer Survey		✓		Measurement and Assessment Unit/Quality Assurance Committee	Employers
18	Alumni Survey		✓		Measurement and Assessment Unit/Quality Assurance Committee	Program Alumni

2.9. Document Control:

Documents created in QMS will be controlled as the following procedures:

1. Approval of document before circulation.
2. Revision, updating, and approval.
3. Ensure changes and latest documents status identified.
4. Ensure latest version of the documents.
5. Ensure documents can be referred when required at any time.
6. Ensure external documents must be identified and verified and their circulation controlled.
7. Prohibit obsolete documents from being used and must be stamped **“VOID”**, if it is kept for any reason.

2.10. QMS Review

2.10.1. Inputs

The review will get input from the following sources:

- ❖ Annual Program Report.
- ❖ Self-Study Report for Program (SSRp).
- ❖ Improvement Plan Review Report.
- ❖ Previous QMS Revision Meeting File.
- ❖ Inputs from stakeholders.
- ❖ Inputs from Environment.

- ❖ Survey Results.
- ❖ Program Evaluation Survey.
- ❖ Course Evaluation Surveys [every semester through e-gate (Academia) when they access to see their results for the course and before the final exam].
- ❖ Alumni Survey.
- ❖ Faculty Satisfaction Survey.
- ❖ Surveys Conducted by Measurement and Assessment Unit of the College of Pharmacy.

The following **Figure 8** shows the preparation and evaluation of Annual Program Report (APR).

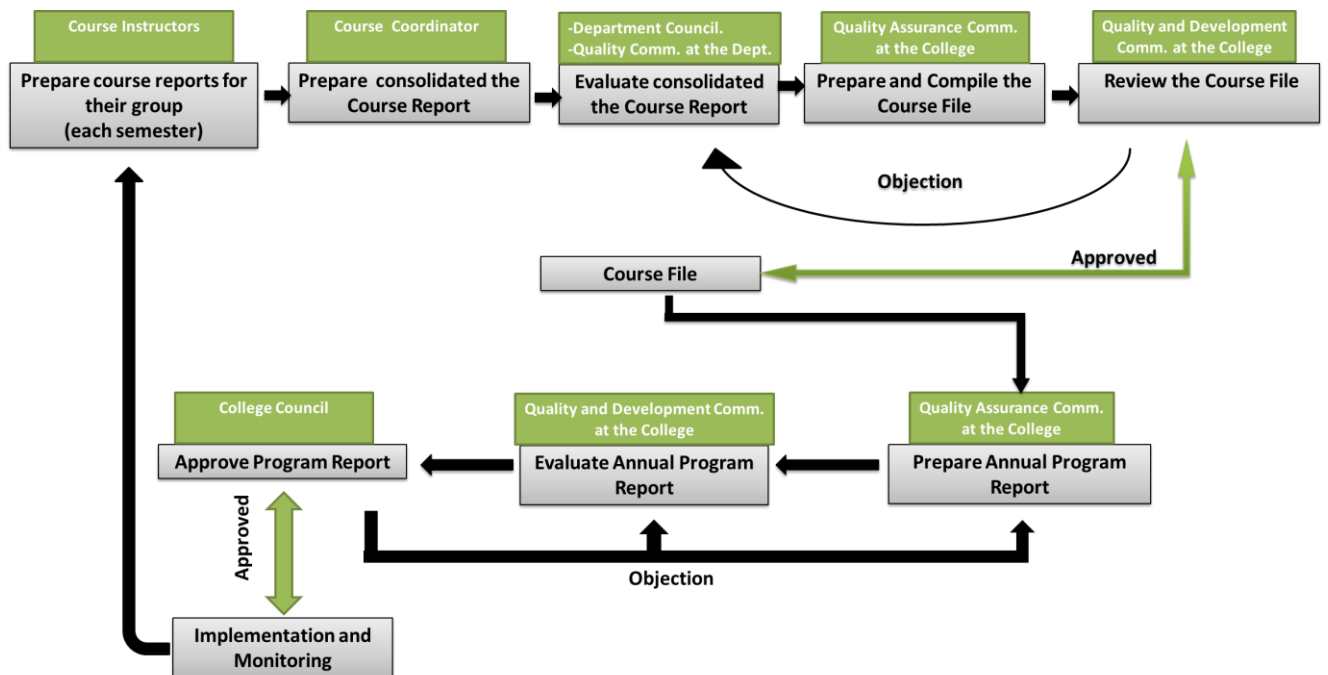


Figure 8: Process of preparation and evaluation of APR

The following **Figure 9** represents the Self Study process and **Figure 10** shows the roles of students and other stakeholders in the SSRP process in the college.

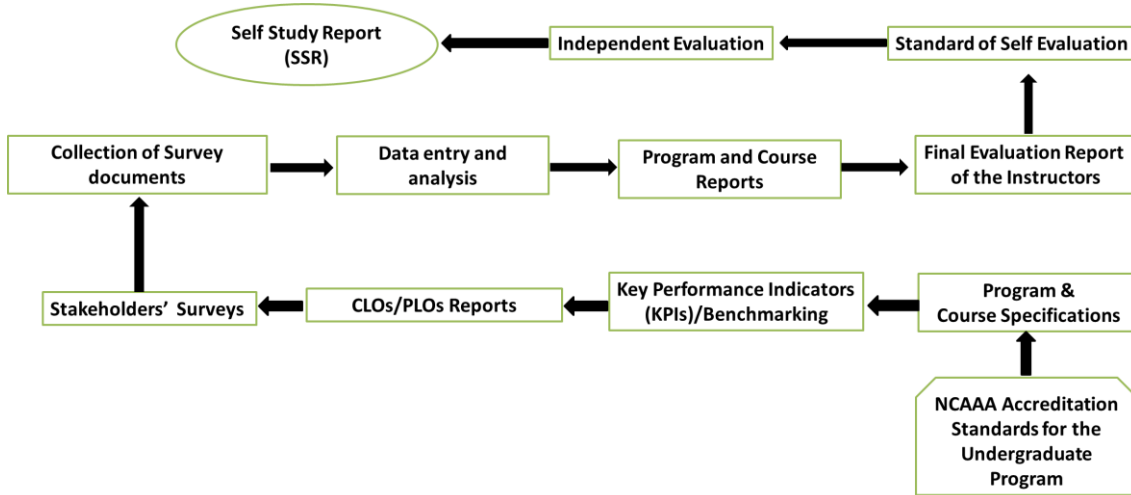


Figure 9: Process of Self Study Report preparation

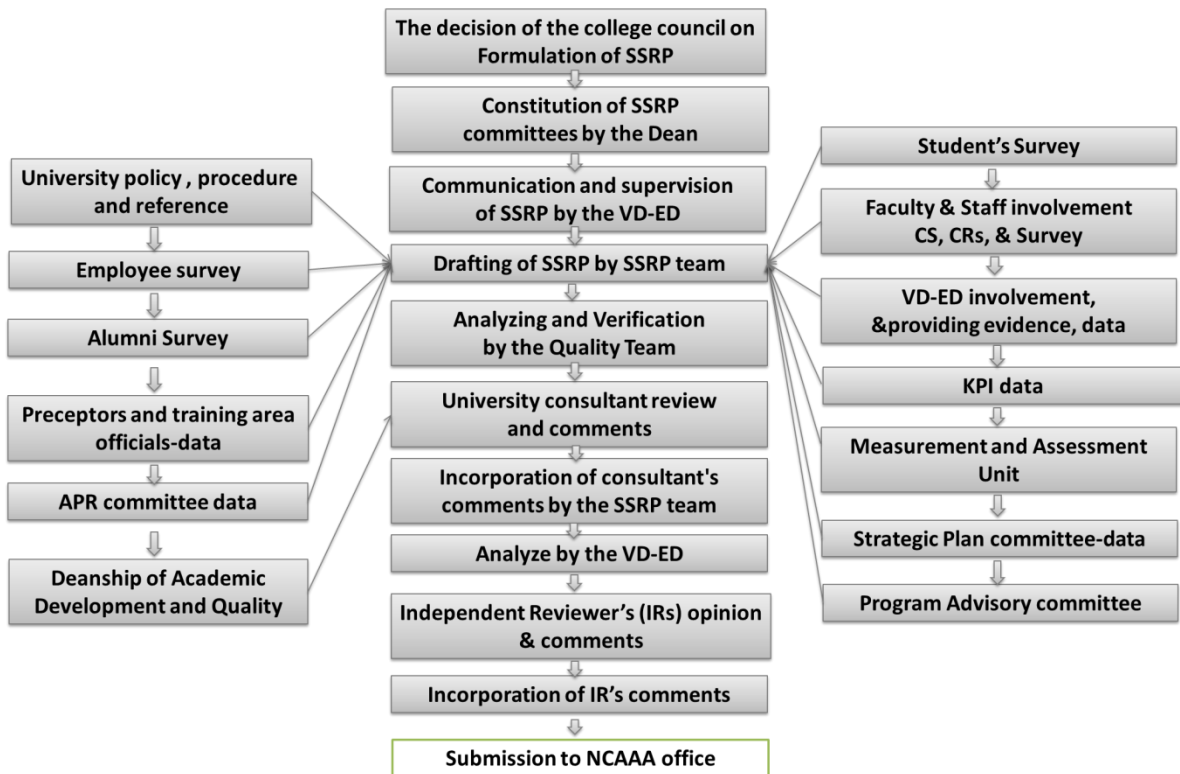


Figure 10: The roles of Students and other Stakeholders in the SSRP process

2.10.2. Outputs

QMS review results will be used to improve:

- ❖ QMS processes and its effectiveness.
- ❖ Needs and requirements of the stakeholders.
- ❖ Resources planning and utilization (human resources and infrastructures).

2.11. College Learning Resources

2.11.1 Library (description, time/operation, list of books, and policies)

The COP at King Khalid University is being served by the two central libraries; one located on the male campus and another on the female campus. Those libraries are managed by the deanship of libraries. Those central libraries have a variety of learning resources which can be briefly mentioned below table:

Table 2: King Khalid University libraries

Number of Libraries in all KKU campuses	Resources			Operation time	Availability
	Medical Books/journals etc	Specialized websites	Internet		
27 General 5 Specialized	32785	LexiCopl	Available in several study rooms	Central Lab in Alfaraa/ 7:30AM-8:30PM (Sun to Thur) Branches Libraries/ 7:30AM-2:30PM (Sun to Thur)	Both Male and Female

2.11.2. Saudi Digital Library (SDL)

KKU maintains an active subscription to Saudi Digital Library and makes it available to students inside and outside colleges using a proxy system. Access to the Digital Saudi Library web databases is available 24/7 to students and faculty members. The Deanship of Library Affairs (DOLA) provides access to the Saudi Digital Library website [<http://lib.kku.edu.sa/guidance.html>] through the main KKU library website.

In addition, The E-learning services offered by the Deanship of E-learning to the COP in order to promote effective communication between faculties and students, including the Blackboard system, TAZAMON, and KKUx. It has been made mandatory in all the courses of the program that the faculties have to upload all their teaching material, tests, assignments, quizzes, and all

announcements through the Blackboard system. In addition, the KKUx platform offers several online courses and workshops that target the professional development of faculties and students.

2.11.3. Specialized learning resources for medical sciences

The COP provides specialized professional resources for pharmacy faculties and students, such as Micromedex® and Up-to-Date® (Lexicomp®). These resources are available to students and faculties to be used during lectures, practicals, introductory, and advanced pharmacy practice experiences rotations.

2.11.4. Software packages

KKU provides several software packages for students and faculty free of charge. This aims to improve the efficiency and effectiveness of the teaching and learning experience at KKU. The free software packages include Office®, some statistical and antivirus software. In addition, a plagiarism check service is available through the Blackboard platform- SafeAssign tool.

2.12. Learning Resources Management:

The learning resources management system is an essential component of successful academic learning. A primary objective of the system is to provide a technical basis for assessing, acquiring, adapting, developing, producing, and distributing quality learning and teaching resource materials for students and instructional support materials for teachers.

The University and COP have introduced several mechanisms for acquiring and maintaining all colleges' facilities and equipment via several administrations and units within the University, such as Purchasing Department, Educational Requirements Administration, Main Storage Administration, and Operation and Safety Administration. In addition, the College manages the learning resources within the College for both campuses to ensure the following targets:

- Equal access for both males and females to College learning resources.
- Facilitating and enhancing the ordering process in the College.
- Close monitoring of the quality and quantity of the appropriate learning resources.

In this regard, several procedures, forms, and guidelines are provided by the college educational committee and included in the Recourses Management handbook as follows:

- Process of Ordering Office Supplies.

- Laboratory Supply Request Procedure.
- Teaching and Learning Material Request Form.
- Training and Development Request.
- Maintenance and Service Requests
- Annual Purchase Procedure.

2.13- A list of King Khalid University and College of Pharmacy rules and regulations is in effect at the College of Pharmacy through the college's website:

University Rules & Regulations:

- KKU academic quality assurance handbook
- Rules and procedures for faculty appointment
- Rules and procedures of faculty promotion
- Rules and procedures for faculty scientific communication
- Rules and procedures of attending scientific conferences
- Rules and procedures of sabbatical leave

College Quality System (Rules & Regulations):

- Quality Management System
- COP Resources Management Handbook
- Committee Operations Manual
- A Guide for identification, data collection, analysis, and approval of Key Performance Indicators
- Assessment of Learning Outcomes Handbook
- Guideline for Preparing the Course Files
- Periodic Program Review Handbook

College Rules & Regulations:

- College of Pharmacy faculty manual
- Academic advisor duties
- Faculty performance evaluation process
- Best faculty awards mechanism
- Lab safety policy for faculty
- Lab waste disposal guidelines
- Waste disposal labels
- Lab inspection checklist
- How to request letter for SCFHS

Graduate Studies:

- Guide for approving academic requests

Research:

- Rules and procedures of research award
- Approved scientific publishing databases
- Scientific integrity rules
- Law of research ethics on living creatures (Ar)
- Law of research ethics on living creatures (En)

General Forms:

- Attending conference request (outside KSA)
- Scientific task report
- Best faculty awards form
- Faculty member evaluation form
- Meeting minutes template
- Event report template
- Change of property custodians

- Compensation request for council meeting attendance
- Scarcity allowance request
- Hazard/infection allowance request
- Vacation request or faculty members
- Vacation request for administrative employees
- Vacation request for medical city staff
- Request letter for SCFHS
- Academic Counseling
- Student case evaluation
- Processing request
- COP-MM- English template
- COP-MM- Arabic template
- Annual committee report (ACR)
- Summary of Annual committee reports
- committee actions implementation and follow-up (CAIF-form)
- Office Supply Request Form (OS-FORM)
- Laboratory supply form (LS-FORM)
- Providing Training and Development Event Form
- Teaching and Learning Material Request Form
- Training and Development Request Form
- Instrument Maintenance Request Form #101
- Gas/Liquid Supply Request Form #102

Research:

- Applying to research ethics committee
- Student-supervisor agreement
- Student safety pledge form
- Contracted Academic Staff
- Housing allowance form

- Request for tuition reimbursement for dependent children
- Request to travel
- Guarantee for contracted staff
- Contract termination
- Scholarship
- Applying for external scholarship
- Applying for internal scholarship
- Request for degree upgrade
- Request for change of major
- Request for change of university
- Request for extension
- Request for termination
- Request for attending a conference

Chapter 3: Committees' Structures and Duties

The following **Figure 11** shows the organizational structure of the quality committee at the college of pharmacy.

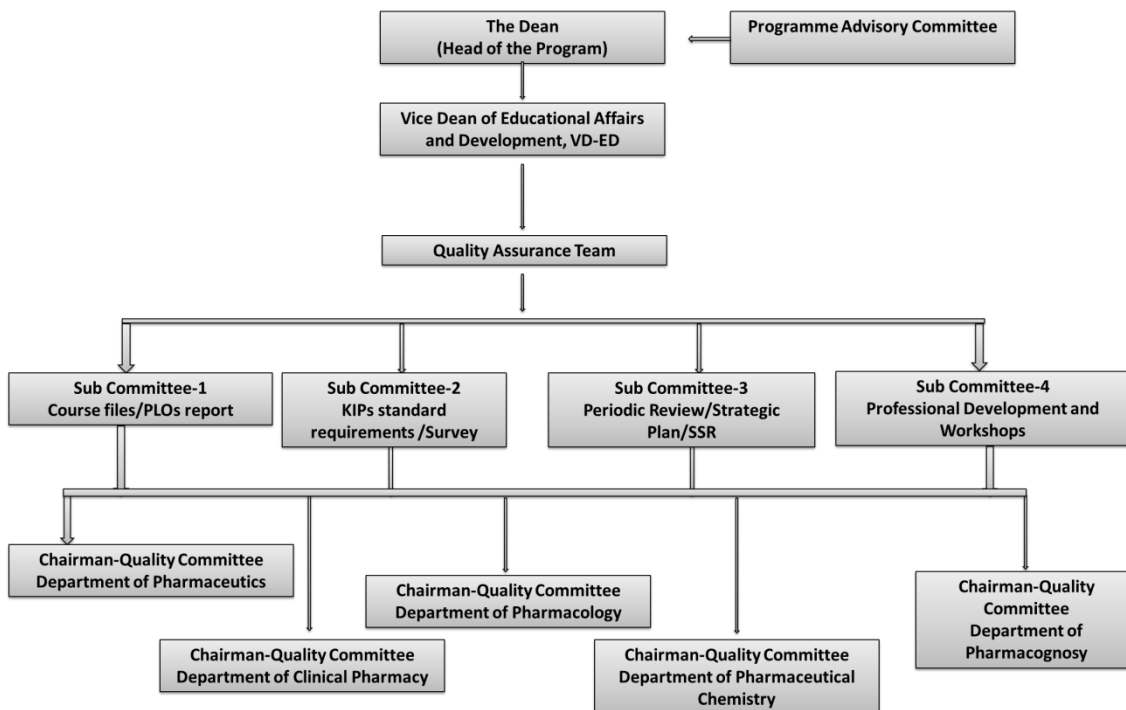


Figure 11: Organizational structure of the quality committee college of pharmacy

3.1. The College Dean:

The Dean is an academic leader with academic, programmatic, managerial, and fiscal responsibilities for the College of Pharmacy (COP). The Dean verifies the adequacy of instruction, monitors academic integrity, confers degrees, and is responsible for student recruitment, admission, and academic progress. He is responsible for the ethical conduct of research and for establishing and maintaining a culture of compliance and integrity among faculties, staff, and students. He also provides directions and resources for the education, training, and implementation of state, and local regulations and adheres to implement the university and sponsoring agency policies and procedures. The Dean reports to the Vice-Presidency of Academic and Educational Affairs, Vice-Presidency for Development and Quality, and the departments'

heads of their colleges to maintain accountability, resolve any significant issues of noncompliance, and reduce the risk of future occurrences.

The major responsibilities of the Dean include the following:

Responsibilities:

- ❖ Coordinating the development and implementing the college's Vision, Mission, and Goals.
- ❖ Leading college efforts towards achieving University goals.
- ❖ Developing the college budget.
- ❖ Leading and coordinating college strategic planning and curriculum development.
- ❖ Supervising, evaluating, and supporting Departments in a manner that promotes excellence in instruction, scholarly and creative productivity, and services.
- ❖ Leading and coordinating the governance of the college.
- ❖ Leading the processes of college administrator selection and overseeing the processes of faculty and staff selection and retention and promotion.
- ❖ Coordinating the professional development of college administrators and staff.
- ❖ Evaluating college administrators and staff.
- ❖ Evaluating Department Chairpersons with Departmental faculty and staff.
- ❖ Evaluating overall Departmental productivity in teaching, learning, research, and community services.
- ❖ Advising the University manager on university policies and procedures.

3.2. Vice Dean for Educational Affairs and Development (VD-ED):

3.2.1. Academic Advisory and Student Affairs Committee

The VD-ED chairs this committee. The committee aims to provide academic support and solve students' academic-related issues with continuous follow-up. If necessary, the committee will contact the Registration Deanship to ask for assistance in some economic and psychological cases. In addition, this Committee is responsible for performing orientation for the new students. Furthermore, this committee delivers academic services to students at all levels of study at COP starting from the point of enrolment to graduation, including assisting students during classes

registrations, and provides guidelines to support students in term of receiving students' issues and completing the required forms for academic purposes.

3.2.2 Class Schedules and Exams Committee:

This Committee aims to coordinate with scientific departments in the college to make students' schedules and match that with students' distribution and faculties loads. In addition, the chair of this committee (VD-ED) can contact the deanship of registration regarding students adding/removing classes and removing prohibitions. Furthermore, this committee ensures the appropriateness of the final examination schedule and prepares the final examination environments.

3.2.3. Students Excuses Committee:

This Committee consists of all Heads of Departments (HOD) and is chaired by VD-ED. The primary duty of this committee is to discuss and evaluate the validity of students' excuses and then report to the Dean to go through the committee's recommendations and approve them. The course coordinators will be informed of the Dean's decision to remove absence and to prepare alternative exams.

3.2.4. Plans and Curricula Committee:

The VD-ED chairs this committee. The main objectives of this committee are: to inform the students and staff regarding the college's vision, mission, and goals. In addition, the Plans and Curricula committee continuously evaluates the attainment of the quality in education processes and looks for improvement. Also, the committee discusses the benchmarking, internal and external reviewers contacting, and fulfillment of the Program Learning Outcomes (PLOs) with the vision and mission of the college and the University with the NCAAA requirements.

3.2.5. Quality and Development Committee:

The VD-ED chairs this committee. This committee is responsible for improving the quality culture within the college by conducting workshops and contacting the Deanship of Quality College the college Dean. Moreover, the committee aims to establish the needs and demands for accreditation processes. This also includes the preparation and annually reviewing the strategic planning for the COP, college annual report, manuals, handbooks, action plans, and provides required evidence for the program report.

3.2.6. Quality Assurance Committee:

The VD-ED chairs this committee. The main aim of this committee is to ensure the implementation of a quality assurance system for academic, administrative, and other clinical activities so that all primary requirements and goals for teaching, learning, and academic services are monitored and fulfilled successfully. COP maintains a system in terms of following academic standards and ensuring the optimal process output. In addition, the committee has a quality representative from each department to follow up on the submission of the department's annual report and all departments' course reports, review course specifications and course reports, and work as a liaison between the central quality committee and the department.

3.3 Vice deanship for Research and Postgraduate Studies Committees

3.3.1 Postgraduate Studies Committee

The Vice Deanship for Research and Postgraduate Studies Committee (VD-RPS) chairs this Committee to coordinate with the departments in the college to establish and design postgraduate study programs. Committee also advises VD-RPS in all matters concerning Postgraduate students' affairs. In addition, helping teaching assistants and Lecturers to attain scholarships at prestigious universities and follow them up after receiving scholarships.

3.3.2 Research Committee

The primary focus of this committee is to coordinate with the scientific departments in the college to improve and follow up the research processes and to motivate the faculties in different research areas. In addition, the research committee discusses the research proposals for final-year students. This committee also identifies the obstacles facing by scientific research faculties and to find the solution in coordination with the relevant authorities. VD-RPS chairs this committee.

3.3.2.1 Graduation Projects Committee

The Graduation Projects Committee is a sub-committee under the college-level research committee representing one faculty from each department. The committee's membership includes the lead supervisors of the graduation projects and is chaired by the VD-RPS. The

committee members take charge of reviewing and approving the research proposals presented by the students. The committee's role is to organize awareness and orientation seminars about the graduation projects of graduate-level students. Also, responsible for organizing the research day and developing an outline mechanism for implementing, following up, and assessing research projects.

3.3.3 Educational Services Committee

The main aim of this committee is to evaluate the needs and demands of the scientific departments in the college and to prepare the annual purchasing list for educational and research purposes. In addition, this committee ensures the safety and risk management policies and procedures in the college's laboratories for males and female's sides. Each one of the five departments in the college can appoint a similar committee(s) within the department to ensure that systematic work is attained. The committees' formation within the department must be approved by the department board and then by the Dean before being effective.

3.3.3.1 Occupational Health and Safety Committee

This is a subcommittee operates under the educational services committee. This committee inspects the workplace periodically by enforcing authorities, management, or employee health and safety representatives. Also provides guidelines on health and safety training, emergency procedures by conducting the workshop, and changes in the workplace affecting the health, safety, and welfare of the employees. The VD-RPS chairs this committee.

3.3.4 Paid-postgraduate program executive committee

The paid-graduate program executive committee, which meets on call, depends upon the Postgraduate Studies Committee of the college for creating policy concerning the paid-postgraduate program at COP and other delegated responsibilities. Also, responsible for monitoring, assessment lifecycle, and student experience across the COP paid program.

3.3.5. Community Services Committee

The VD-RPS is the chair of this Committee. The main aim of this committee is to encourage the community services concept among the staff and students. The committee discussed the Quality Assurance Handbook potential events and awareness with the Dean of COP. The committee will provide an annual report with the total number of events and benefactors.

3.4. Vice deanship for female students' affairs

3.4.1. Internship and Training Committee

The Internship and Training Committee on the female side carries the same responsibility as mentioned in the graduation projects committee, and the VD-FSA chairs it. The committee ensures a proper training has been given to the student through research projects or clinical rotations in the pharmacy field.

3.4.2. Alumni Association Committee

This committee aims to formulate and oversee the implementation of the policies of the Alumni Association. Also, it acts as a channel of communication between the Alumni Association, the college, and the University. Moreover, this Committee's role in arranging and running events on behalf of the Alumni Association. In addition, to strengthen the relationship between the current students' lot and arrange and run the Annual Meeting of the Alumni Association.

3.4.3. Role of Department-level Committee

All departmental-level committees will be formed by the head of the department (HOD), with one repertoire appointed by the HOD to schedule, write and take approval of the meeting minutes from the chair. The departmental Committee's tasks, roles, and responsibilities will be the same as those mentioned in the college-level committee.

3.5. Special committees

Special committees usually have a definite life span, which terminates upon completion of its purpose

3.5.1. College Prizes and Dean's List selection Committee:

This Committee is responsible for building up and announcing the criteria for best students' performance and Dean's list nominations. The Committee's members meet every semester to discuss the candidates' qualifications and publicly announce the list.

3.6. Appointments to Committees

The committees in the college of pharmacy are formed based on the needs and area of specialty. Males and females represent all committees equally, or independent members from either side represent the committees that are directly related to the female or male campus to give a chance to share ideas and thoughts. Each committee follows the Dean or any Vice Deanship according to the determined responsibilities and duties. In addition, the five departments in the college are formed standing and special committees based on the need, and both male and female members form these committees. For the Special Committee, the college board, deans, vice deans, and department chair can form any committee for a short span with specific tasks and objectives based on the needs.

3.7. Committee Meetings

3.7.1 Scheduling Meetings and Attendance

All college-level and department-level committees meet periodically to discuss the matter under consideration and should work under the framework and role of each Committee. Minutes of the meeting must be appropriately documented. A unified college of pharmacy-meeting minutes (COP-MM) has been created to fulfill this need.

3.7.2 Minutes of Committee Meetings.

An effective form of meeting minutes was formed (COP-MM) to be used in both committees level; college-level and/or department-level committees. This form (here) has been made to ensure that these committees' recommendations and action plans are monitored and evaluated (Closing the quality loop) **Figure 11.**

3.8 Committee approval and follow-up Procedures

After the responsible person approves the meeting minutes (the Dean, VDs, department chairs), the recommendation(s) that need an action must be extracted from the meeting's minutes and must be shifted to the committee actions implementation and follow-up form (CAIF) **Figure 12.** This form must be revised and presented again in the second meeting to ensure that all action plans are fulfilled correctly.

3.9. Committee Meeting Minutes report and documentation

Each Committee must write the annual report using the following report template (Annual Committee Report; ACR). This will help the department chairs/VDs/the Dean/manager to identify the performance of their committees at the end of the year. Finally, one template was made to help the HODs and VDs to summarize their committee progress and using it for his/her annual reports writing (See “Summary of ACRs” template.

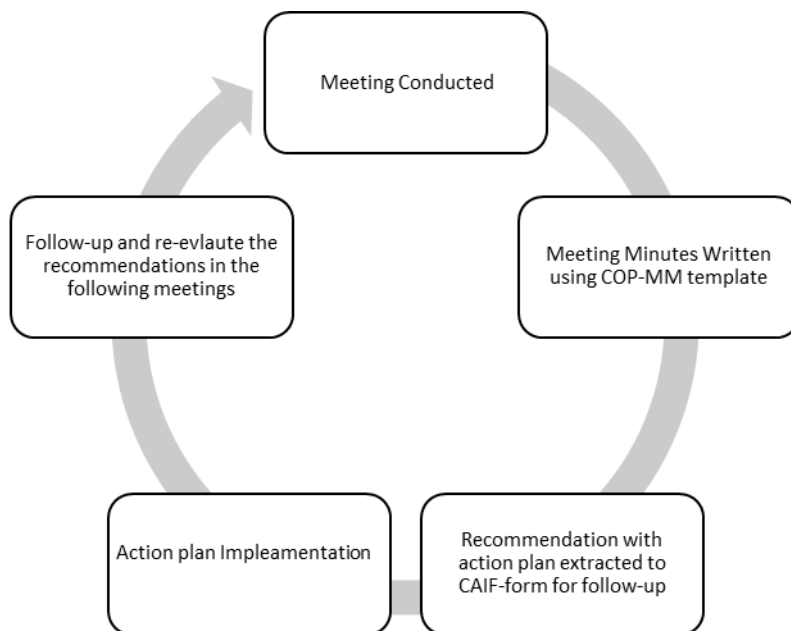


Figure 12: Work cycle of committee

3.10. College of Pharmacy Advisory Board

The advisory board has been established to collaborate with the College and will only provide advice related to its educational/academic programs shows in **Figure 13**. The specific objectives of the advisory board may include the following:

- ❖ To provide external counsel to the College to support its teaching, research, and service missions.
- ❖ To advise the College dean, the faculty, and other administrative officers on strategies and means of developing resources for enhancing the goals and objectives of the College.

- ❖ To promote the College to potential students, employers, legislative leaders, governmental agencies, businesses, and industry.
- ❖ To enhance the visibility of the College's significant research and instructional programs.
- ❖ To assist in strengthening financial support for the College.
- ❖ To assist in placing students at employment sites.
- ❖ To facilitate cooperation and communication between the program and the community.
- ❖ To help the program set priorities, including participating in ongoing planning activities.
- ❖ To help the college adapt its program to the labor market.

It is the role and sole prerogative of the College of Pharmacy to enact policy. The advisory board plays an essential role in reviewing the College's plans and strategies, then provides suggestions and help to target the optimal decision.

3.10.1. Composition

The advisory committee shall consist of 9-15 members representing academic, public and governmental agencies, businesses, industry, and alumni, as well as the College Dean and vice deans.

3.10.2. Member Selection

The advisory board members are selected and appointed by the college of Pharmacy board. Then, it should be approved by the college board and the University President. The Committee chair can ask anyone other than the committee members to attend the meeting based on the need.

3.10.3. Term

A membership term shall last for one year, and it can be extended based on the need.

3.10.4. Meetings

The board will meet at least two times per year through the following procedures:

Before the meeting:

- ❖ The Dean will call the VDs , Head of Departments, and Administration manager to provide their files and subjects related to the College's concerns and improvement process. Two weeks will be given to prepare the files.
- ❖ The Dean's office will arrange the time and location of the meeting.
- ❖ The Dean's office will prepare the agenda and the meeting room.
- ❖ The agenda will be written and get approved by the Dean.

During the meeting:

- ❖ The Dean will moderate the meeting, and all agendas will be discussed and reported.
- ❖ All needed surveys and forms will be provided along with the agenda (if required).

After the Meeting:

- ❖ The Meeting minutes will be written and sent to the members to sign.
- ❖ The action plans form (Advisory committee action plan form "ACAP") will be used to follow up with the recommendations that are mentioned in the minutes.
- ❖ Then, each subject will be sent to the corresponding Vice deanship, department, and/or unit to start working on the action plan.
- ❖ The follow-up and evaluation of the implemented action plan need to be discussed with the Dean and the College Board.

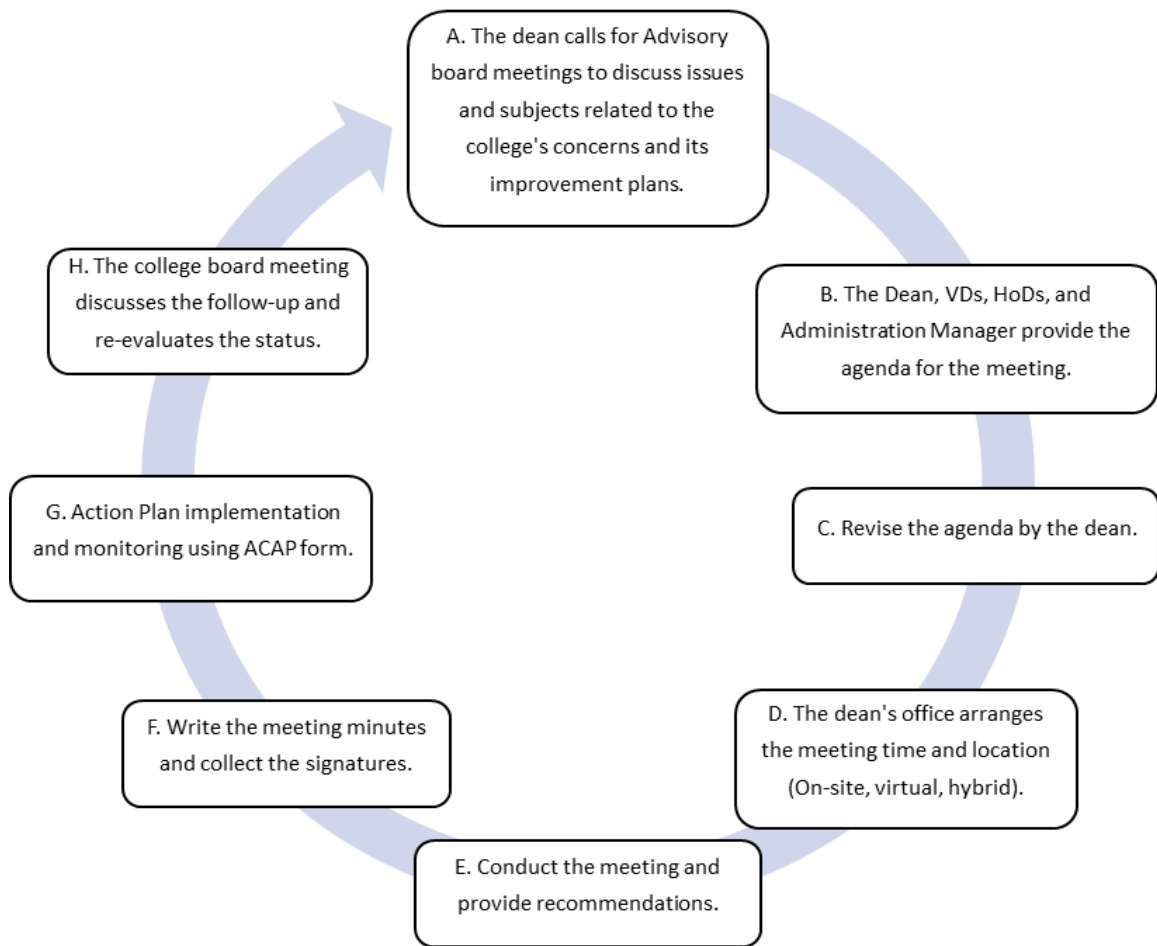


Figure 13: The College Advisory board work cycle

Chapter 4: The National Qualifications Framework for Saudi Arabia (NQF-KSA)

4.1. National Qualifications Framework (NQF)

The National Qualifications Framework represents a comprehensive and uniform system for building, organizing and placing qualifications into levels based on learning outcomes. It is not only essential for creating a uniform system for qualifications, but it also serves as a way to communicate and compare insights. Additionally, it acts as an efficient tool for helping to transfer of knowledge, skills and values to the various work environments, at both the national and international levels. The National Qualifications Framework is a powerful connecting point between educational and training systems and real-world job demands. Education and training are interactive – they respond to and meet the needs, hopes, and capabilities of society, while also meeting the requirements of sustainable development in all areas of life.

4.2. Learning Domains

Learning domains describe the learning which a learner needs, including the necessary knowledge, understanding, skills and values to obtain the qualification, according to each level specified in the Framework. These levels are progressive in the Framework levels from Level (1) up to Level (8) in terms of scope and sequence.

They are expressed in terms of cognitive dimensions, skills and values according to the following:

- ❖ Knowledge and understanding: This includes the knowledge and understanding of a learner in the area of learning, work or profession:
 - Extensive deep knowledge, understanding of facts, concepts, principles, theories, processes, and procedures provided for in the area of learning, work, or profession.
 - Depth of knowledge can be general or specialized.
 - Breadth of knowledge can range from a single topic to a multi-disciplinary area of knowledge.
 - Kinds of knowledge range from concrete to abstract, from segmented to cumulative.

- Complexity of knowledge refers to the combination of kinds, depth and breadth of knowledge.

- ❖ Skills are what a graduate can do for continued learning, work or profession, including:
 - Cognitive skills: These include applying knowledge, critical thinking and problem-solving skills, inquiry, and creativity.
 - Practical and physical skills: These include applying knowledge, using appropriate materials, devices, and tools, and applying motor and manual skills with ingenuity.
 - Communication and information technology skills: These include written, verbal and non-verbal communication, numeracy skills, and the use and production of information and communication technology.

- ❖ Values: These include what the graduate represents in terms of principles and standards that are oriented towards success in the areas of life, work, or profession. They include:
 - Academic and professional values and ethics.
 - Continued self-learning and autonomy.
 - Teamwork and responsibility.

4.3. NQF Level Descriptors

Table 3: NQF Level Descriptors (Level-7)

Domains of Learning		Level 7 expected learning area	
Knowledge and understanding		In-depth and specialized body of knowledge and understanding covering theories, principles, and concepts in main areas of discipline, profession, or field of work,	
		Critical knowledge and understanding of processes, materials, techniques, practices, conventions and/or terminology relevant to a certain discipline, profession, or field of work.	
		Advanced knowledge and understanding of recent development in one or more disciplines or areas of practice or profession.	
		Advanced knowledge and understanding of a range of established and specialized techniques of research and/or inquiry in a discipline.	
Skills	Cognitive skills	Apply specialized theories, principles, and concepts in advanced contexts, in a discipline, profession or field of work.	
		Solve problems in complex and advanced contexts, in a discipline, profession or field of work.	
		Critically assess, review, and reflect on key concepts, principles, and theories; and provide creative solutions to current issues and problems in complex and advanced contexts, in a discipline, profession or field of work.	
		Conduct advanced research or professional projects using specialized research techniques and enquiry methodologies in a discipline, profession, or field of work.	
	Practical and physical skills	Use advanced and specialized processes, techniques, tools, instruments, and/or materials to deal with complex and advanced practical activities.	
		Carry out complex and advanced practical tasks and procedures in specialized areas related to a discipline, professional practice, or field of work.	
	Communication and ICT skills	Communicate in various forms to disseminate knowledge, skills, research results, and innovations related to a discipline or field of work to specialist and non-specialist audiences.	
		Process data and information quantitatively and/or qualitatively in complex and advanced contexts related to a discipline, professional practice, or field of work.	
		Select, use, and adapt advanced digital technological and ICT tools and applications to process and analyze a variety of data and information sets to support and advance leading research and/or projects related to a discipline, professional practice, or field of work.	
	Values, autonomy, and responsibility	Values and Ethics	Demonstrate integrity and professional and human values when dealing with various issues and problems.
		Autonomy, and responsibility	Collaborate and participate effectively in research groups or professional projects and assume leadership role with a high level of responsibility in the respective field of work.
Initiate professional planning for learning and/or work, and professional development, monitor learning and performance, and take part in academic and / or professional strategic decisions, with high autonomy			
Manage specialized tasks and activities in a discipline, work, or field of practice effectively, with high autonomy.			
Contribute to the fostering of the quality life for the community.			

4.4. Determination of Credit Hours (accredited units):

According to the Education and Training Evaluation Commission, credit hours represent the unit of measure of the amount of time required to learn or the amount of learning required to obtain the qualification. Credit hours are calculated by the number of hours required to achieve the learning outcomes of the qualification (credit hour is not less than 50 minutes), based on the governing regulations, as follows:

- ❖ The number of credit hours (accredited units) accredited for each module or program is an indication of the expected amount of learning, and these expectations are linked to the number of actual hours of study in different learning activities, such as classes, auxiliary classes and laboratories.
- ❖ The academic endeavor represents the total number of units of study in which the learner is allowed to register. The lowest and highest levels are determined according to the rules governing educational and training institutions, provided that they are not less than (12) hours (units) accredited for the learner with a full-time system in one semester and (24) hours (units) accredited in one academic year of two semesters.
- ❖ (15) credit hours (accredited units) were taken as a measure of the amount of teaching and learning usually expected for regular learners at graduate levels in one semester, and (30) credit hours (accredited units) accredited in one academic year consisting of two semesters, which represents the minimum.
- ❖ The minimum teaching hours for a bachelor's degree are (120) credit hours (accredited units).
- ❖ The minimum learning in one semester is (15) weeks with a full-time system, or equivalent in part-time.

4.5. Number of Credit Hours (Accredited Units) for Qualifications

Bachelor's Degree

- ❖ Obtaining this qualification requires passing at least (120) credit hours (accredited units), which usually requires between (3-4) academic years, with a full-time system, or equivalent in higher education.
- ❖ The length of the program varies according to specialization. The minimum requires passing (120) credit hours (accredited units) in most specializations; however, there are

specializations that end with a bachelor's degree and require passing a greater number of accredited units, and when bachelor's programs require a greater number of units, and a longer time as is the case in some vocational disciplines; the qualification remains the same in terms of the terminology and level.

- ❖ The accredited units are registered in the academic record for the purpose of documenting the amount of additional learning required for these specializations, with the exception of some specializations that require (6) years of study or more, with a full-time system, such as medical specialties and others.

Chapter 5: Academic Program Development and Review

5.1. Program Planning and Design

Curriculum design of the College of Pharmacy at King Khalid University is a directive by ensuring that program and course learning outcomes are of high academic integrity, consistent with other national and internal Universities, and delivered in a way which is highly consistent with the needs of our increasingly diverse student body in pharmacy. Implementation of curriculum design involves adaptation to the relevant NCAAA qualification standards and recognition of curriculum contents and the strategies.

NCAAA qualification standards do set down particular qualifications, course learning outcomes and program learning outcomes for the understanding of the purpose(s) and associated credit guidelines and assessment criteria(s).

However, identifying appropriate curriculum contents, i.e., course learning outcomes, program learning outcomes and the strategies that will make possible comprehension of the program learning outcomes and purposes of qualifications, are done following specific steps as shown in **Figure 14** with elaboration below.

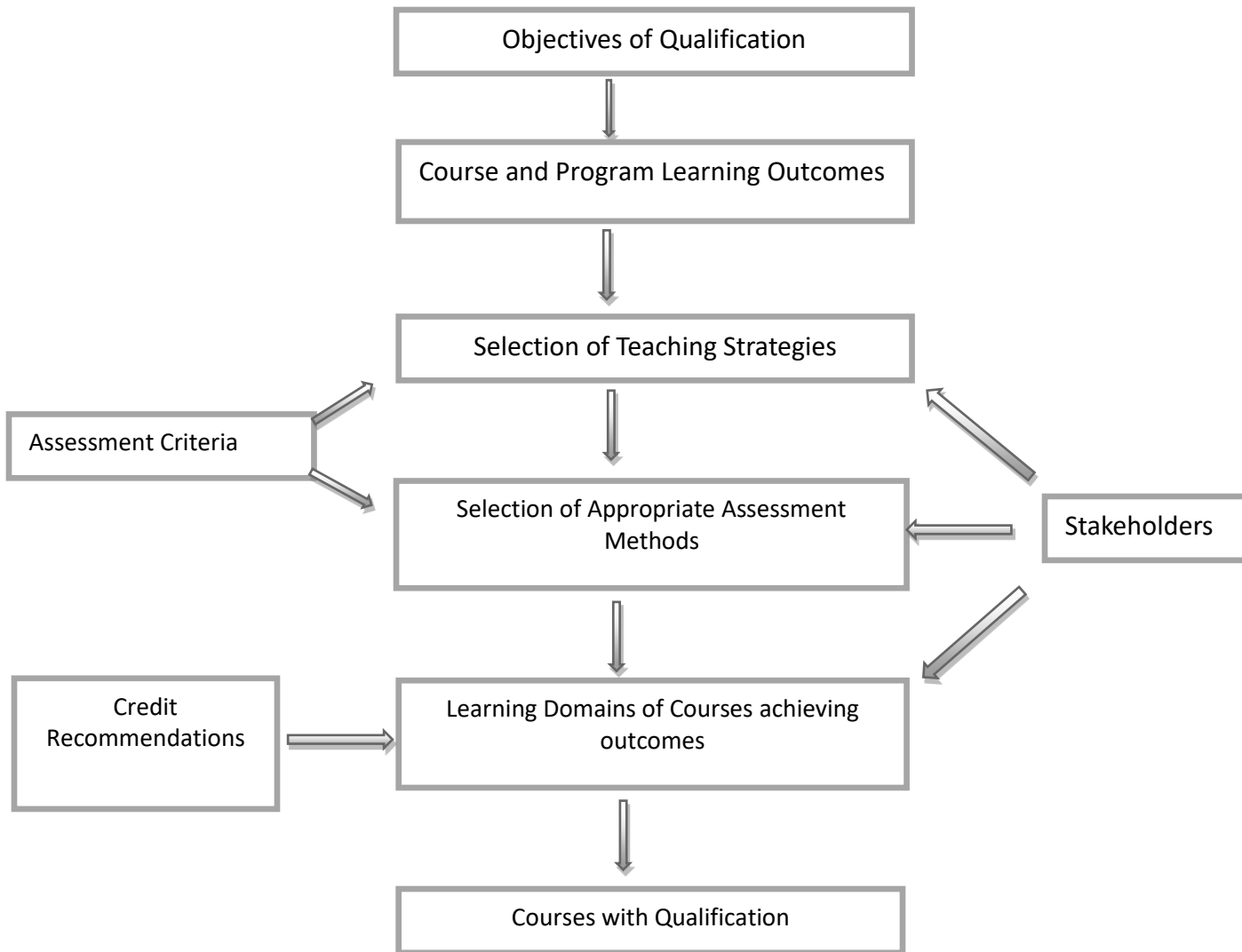


Figure 14: Steps in constituting Curriculum Design Process

It is very important to ensure the varieties of programs offered by the University that align its mission, vision, and goals as well as the needs of the Kingdom of Saudi Arabia. In addition, program design, development, and approval are important for setting programs at an appropriate academic standard. Specific consideration should be given to relevant external reference points and benchmarks, demonstrating comparison of standards with nationally and internationally accepted institutions and organizations.

Adaptation of any international standards needs to be admired the NCAAA's Standards for Quality Assurance and Accreditation of Higher Education Programs, the National Qualifications Framework (NQF) and any relevant national and international professional bodies, such as societies, commissions, committees, etc.

Proposed a new program is considered within a college for planning approval in the light of both academic and planning criteria, including the consideration of the resource implications for any proposal, and the inputs of different stakeholders. The meetings need to be structured and objective to help in program improvement, with clear decisions as an outcome including any recommendations for change to the proposal.

The plan proposals for the program must be subsequently submitted to the higher authorities. Their view process to determine the approval of the development of a program shall take into account the strategic plans of universities and colleges and their relationship with their main objectives. The final program planning agreement is approved by the KKU Plans and Curricula Committee and by the University Council respectively.

After the program design is completed by the program design team, the process of monitoring and decision-making for the approval of a program must be approved through the departmental council (where it exists), the university student plans and curricula committee, the university council and the university plans and curricula committee before being submitted to the King Khalid University Council. It is ultimately authorized to approve academic provisions within the university and is sent to the Supreme Council of the Ministry of Education to approve them.

5.2. Major Changes

This is one of the change types of curriculum design adopted by the College of Pharmacy at King Khalid University. The key components of major changes are bellows:

1. Study plan
2. Program name
3. Program learning outcomes
4. Program/course total credits

5. Program mission and goals
6. Course addition or removal (elective or compulsory)
7. Offered degree name

The process of major changes is done following specific steps, as shown in **Figure 15** and elaborated below.

1. For changes, any major components mentioned above should be discussed and approved in the college plans and curricula committee before presenting to dept. Plans and Curricula committee.
2. It needs to be discussed in the dept. plans and curricula committee and approved
3. Both decisions (college plans and curricula committee & dept. plans and curricula committee) need to be approved by The Dean before presenting to the College Board for the approval.
4. After the approval by the Dean, it will be presented again to the college plans and curricula committee to review before presenting to the College Board for approval.
5. After the approval by the College Board, it will be presented to the KKU president's approval.
6. Then, it will be presented to the KKU plans and curricula committee for discussion and approval.
7. After the approval by the KKU plans and curricula committee, it will be presented to the Ministry of education for the final decision and approval by the Minister.
8. It will be considered accepted and ready for implementation/practice in the program.

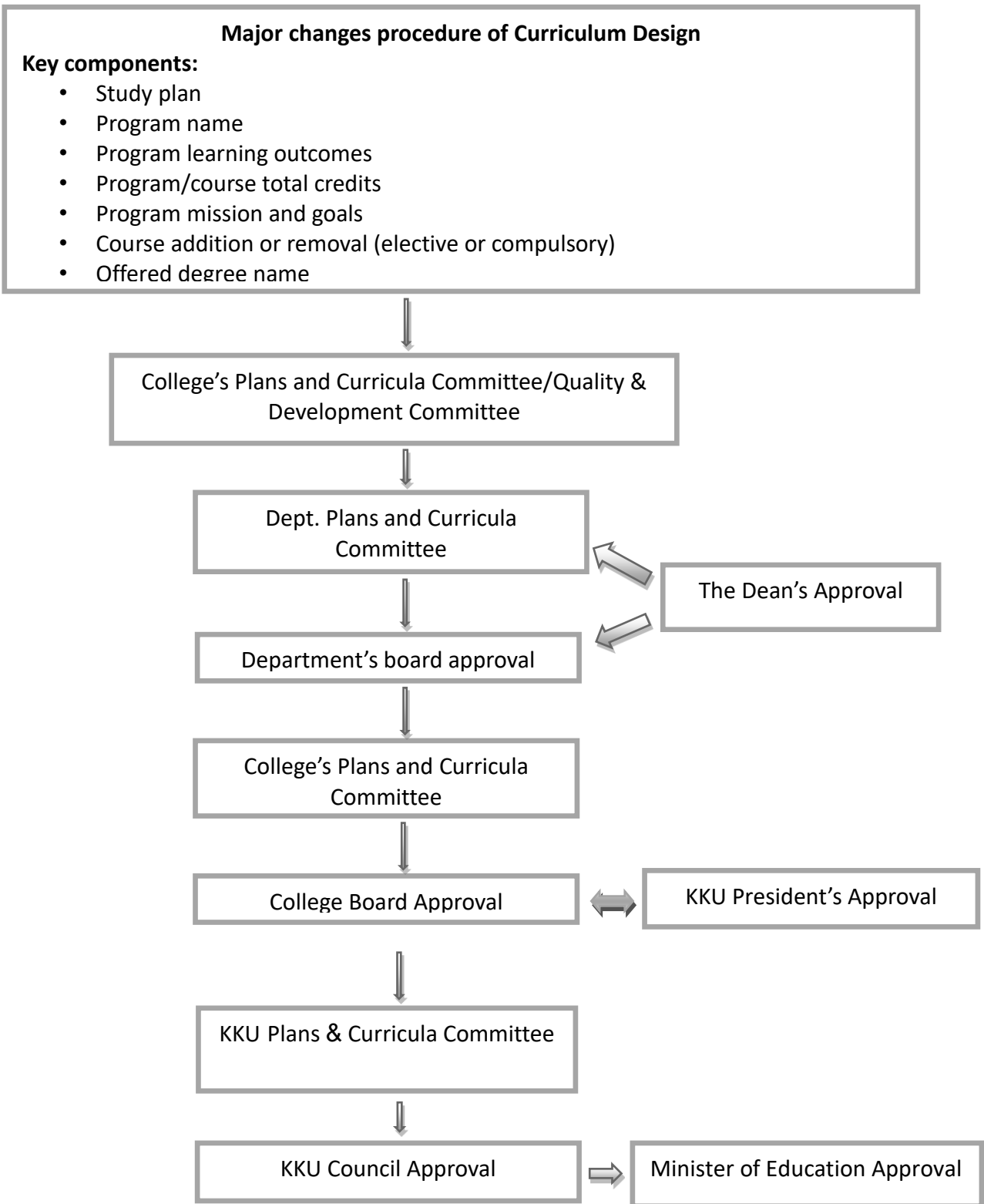


Figure 15: Major changes procedure

5.3. Minor Changes

This is another change in curriculum design adopted by the College of Pharmacy, King Khalid University. The key components of major changes are bellows:

1. Course code.
2. Course name.
3. Pre-requisites.
4. Course learning outcomes.
5. Transferring a course to a different level.
6. Teaching strategies.
7. Assessment methods and grade distribution.
8. Course content change (not more than 20%).

To make such minor changes to courses, appropriate documents need to be submitted. The process of major changes is done following specific steps, as shown in **Figure 16** and elaborated below.

1. For changes, any minor component mentioned above should be discussed and approved first in the college plans and curricula committee before presenting to the dept. plans and curricula committee.
2. It needs to be discussed in the dept. plans and curricula committee and approved
3. Both decisions (college plans and curricula committee& dept. plans and curricula committee) need to be approved by The Dean before presenting to the College Board for approval.
5. After the approval by the College Board, it will be presented to the KKU president's approval.
6. After approval from the KKU president, departments will be notified through The VDED.
7. It will be considered accepted and ready for implementation/practice in the program.

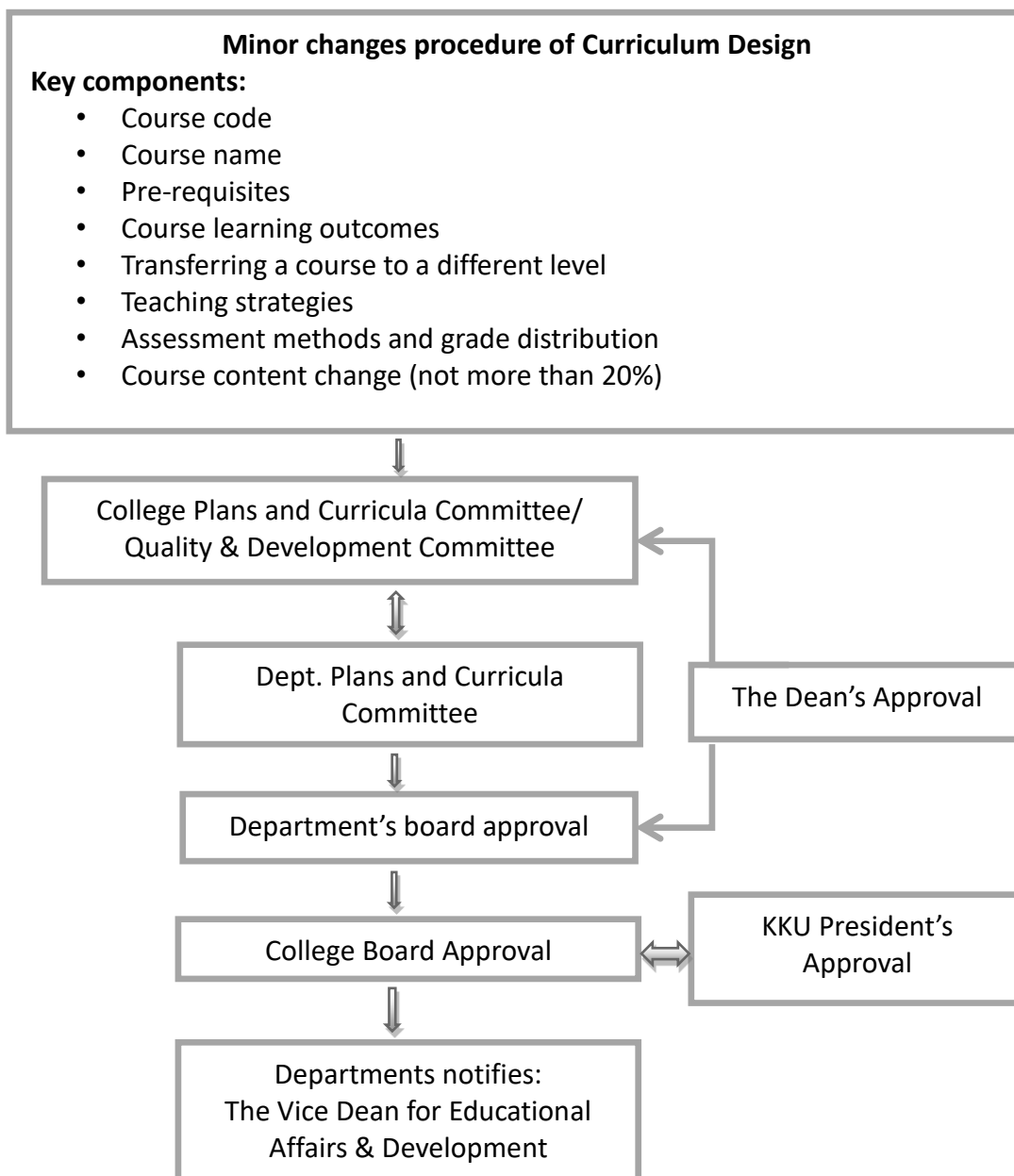


Figure 16: Minor changes procedure

5.4. Program and Course Annual Monitoring and Reporting

In order to maintain the quality of the PharmD program for the long term, a self-assessment should be carried out the program every five years to ensure that it remains in accordance with the reaccreditation requirements of the organization. The self-evaluation process involves a retraction from the continuous process and a revision of all areas of the program based on present developments during a specific period and on the potential changes that have occurred

in the environment in which the students are being prepared to work. The quality assurance activities at the program level are presented in **Table 4** below.

Table 4: The Quality Assurance and Accreditation Procedures at Programs/Faculty levels

Activity Name	Start of Semester	End of Semester	Annually	Every 5 years
Programs level Activities				
Strategic Plan Development				√
Self-Scale Evaluation Report				√
Program Specification Review				√
Student's evaluation of the quality of the course		√		
Course Report Preparation		√		
Course Recommendation Reporting/Action Plan	√		√	
Course File Preparation and Submission		√		
Program mission and goals SWOT Analysis Reparation and Reporting				√
Program KPI Report Preparations and Analysis			√	
Annual Program Report Preparation/Revision			√	
Program Self- Study Report Development				√
KPI Execution Follow-up		√		
Advisory committee report			√	
External reviewer report				√

Figure 17 shows the continuous quality improvement cycle and how the process is being reflective by collecting evidence and looking at course reports, analyzing the issues and evidence and comparing the program performance against the key performance indicators (KPIs) or target benchmarks for the subject area. This should lead to program improvements. Hence, annual monitoring of programs and courses is the cornerstone of the quality assurance processes, and leads to a review of every program's currency, ensuring the continuing relevance, appropriateness and success of the award and student experience. The aims of annual program and course reporting are:

- ❖ To evaluate the statistical information on student recruitment, grades, progression and completion.
- ❖ To consider and respond to inputs and feedback from students, and if appropriate external agents such as professional and accreditation bodies.
- ❖ To reflect on the learning, teaching and assessments strategies deployed, and consider any recommendations for changes.
- ❖ To review the appropriateness and effectiveness of the learning outcomes in securing the program aims and objectives.
- ❖ To recommend changes for improving the student learning experience or curriculum content.

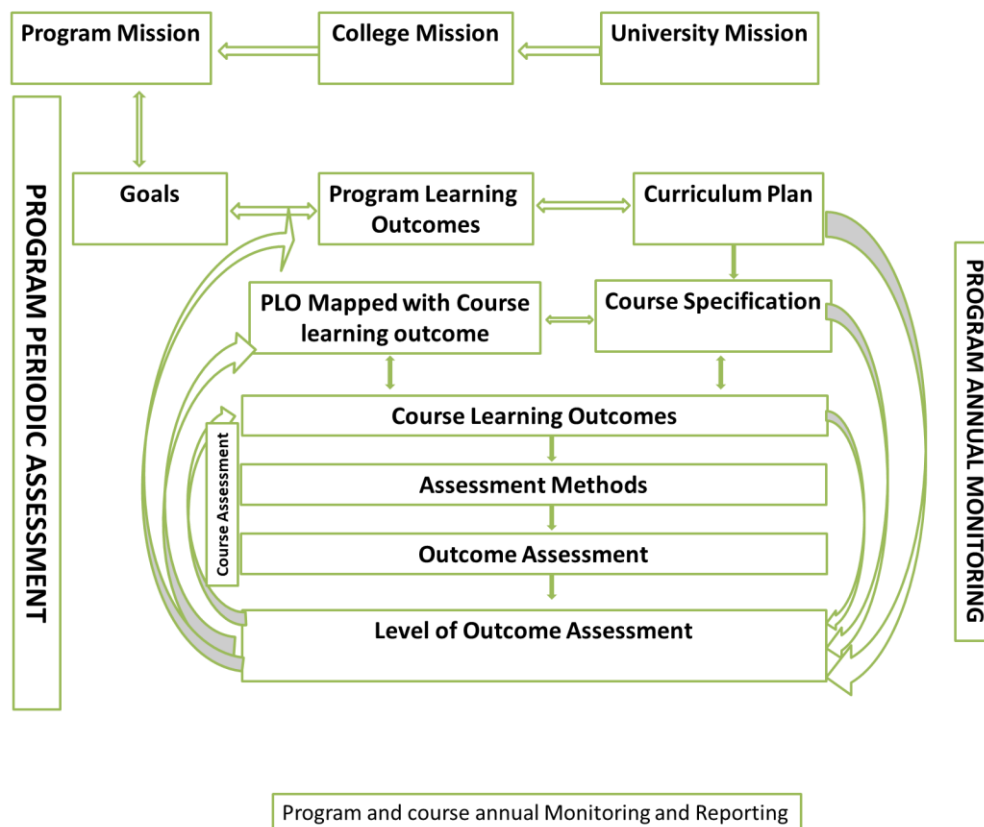


Figure 17: Program and course annual Monitoring and Reporting

5.5 Review Structure

Once the need for curriculum review is clear, which shall be demonstrated by the gap between what the performance indicators are showing and the targeted values, one will need to clearly identify the required intervention. Curriculum review could therefore be either for the purpose of:

- ❖ Improvement of competencies, in order to be in line with revised competence standards or other NCAAA norms.
- ❖ Improvement of competencies, in order to attain a competitive edge.
- ❖ Ensuring flexibility of curriculum in response to modern socio-economic trends.
- ❖ Rationalizing efficiency in curriculum implementation.
- ❖ Any combination thereof.

As it is shown in **Figure 18**, curriculum review and evaluation essentially involve ascertaining the quality of a given curriculum. That is, the value or worth of a curriculum, in terms of curriculum

inputs, processes, outputs and outcomes in line with current needs of employers, the profession, the graduates and society at large, as well as current NCAAA norms. The ultimate goal is to renew the curriculum.

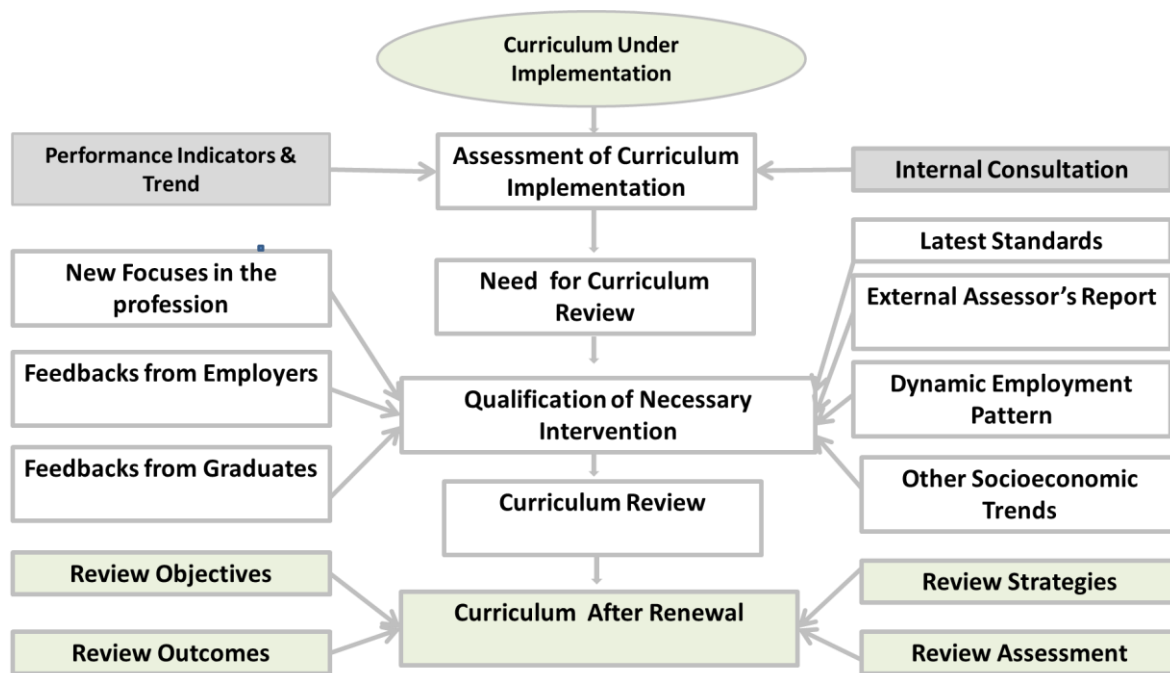


Figure 18: A System for Curriculum Review

5.6. Periodic Program Review

A Periodic Program Review (PPR) guideline is designed to provide an opportunity for reflection on the academic experience of students, academic standards, and enhancement of the program progress over a period of time. This is undertaken through the measurement of student performance, the impact of change, the merits of curriculum design, and strategies for learning, teaching, and assessment beyond the annual program reporting cycle. The PPR examines the program in greater depth, re-evaluating the need for it, checking on how effectively it is achieving its mission and objectives, and considering any changes which need to be made. PPR will enable a program to reflect on its strengths and areas for improvement in order to improve the experience of the students. This PPR is to be implemented in accordance with King Khalid University standards and requirements, and also with the requirements of the NCAAA in the Kingdom of Saudi Arabia.

Scope of Periodic Program Review (PPR): PPR should evaluate the both quality and the standards, considering the following aspects:

- ❖ Enhancement of the curriculum
- ❖ Enhancement of the student learning experience
- ❖ Enhancement of teaching and assessment
- ❖ Enhancement of the organization and management of the program
- ❖ Enhancement of teaching and learning resources

The reflection and evaluation will lead to the planning for the future operation of the program.

The Deming Cycle

PPR through follow-up, evaluation, and period reports are crucial for corrective measures to improve the program performance and the achievements. To ensure the quality of academic programs, a fixed system should be in place to regulate the sequence of different stages in the program's academic performance planning, implementation, and follow-up, as shown in the **Figure 19** below. PPR will be carried out through the applying a simplified and comprehensive Deming cycle model which is the most important model used to determine the different stages of the quality system to ensure continuous quality assurance improvement.

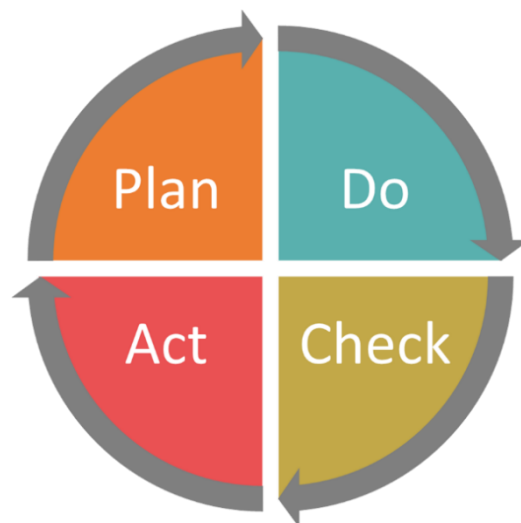


Figure 19: Deming Cycle

The Deming Cycle consists of the following stages:

Plan: During this stage, plan what you want to change and make measurements. Diagnose what strength points that must be enhanced and the weak points that the plan will work to remedy.

Do (Implementation): Implement the planned activities and note the effectiveness of those activities in achieving the desired activities.

Check (Evaluation): It is the stage in which the measured results are evaluated and analyzed, solutions for improvement are proposed, and implementation methods are determined.

Act (Correction): Act on the study's findings. The end result should be more modifications and changes. In case the desired results and goals are not achieved, we go back to the planning step and try again.

Arrangements for planning and reviewing the quality of the program:

1. Preparation of program and course specifications according to the NCAA guidelines and rules, as well as a variety of program reports that offer information bases for the planning of periodic program review.
2. Course specifications are prepared to give a clear guide for the instructor in course topics, teaching strategies, and assessment methods.
3. Course reports are being prepared by the course coordinator/instructor at the end of each semester. The course report will be submitted to the college quality assurance committee after it is a review by the department board and/or the department quality representative.
4. The college quality assurance committee prepares the annual program report using the data and information provided in courses reports and prepare the action plans for noticed weakness and/or ameliorate the academic performance
5. Preparing the all other requirements for program periodic review such as survey reports, reports on graduate attributes, KPIs reports, PLOs measurement reports, Mission/vision achievement report, curriculum reviews update, annual program reports, and other internal or external review reports.

Types of comprehensive review

A- Internal review: Carried out in two stages

First Stage:

- All documents mentioned above related to the program will be sent by the quality assurance committee for checking by the faculty members.
- An annual meeting will be conducted with student representatives and faculty members.

Second Stage:

- A comprehensive report will be submitted by the quality assurance committee to the quality and development committee, which includes strengths and weakness points and improvement recommendations.
- The report will be submitted to the College Board for further action.

B- External review and independent opinion

- An annual meeting will be conducted with the college of pharmacy advisory committee and alumni representatives. In addition, an external reviewer will be invited every five years to review the program, facilities, and resources and a report will be provided.
- These review reports and meeting minutes will be done periodically in order to evaluate the college' academic processes, and activities. In addition, it will guide the college to improve its program mission, strategic goals, and its academic outcomes.

5.6.1 Measurement Policy:

Both performance measurement and program evaluation can be used to identify program weaknesses and assess whether the program is succeeding in its objectives. Performance measurement is a continuous procedure that uses pre-selected performance metrics to track and report on a program's accomplishments. However, program evaluation makes use of measurement and analysis to respond to detailed inquiries about how effectively a program is fulfilling its objectives and why. Consequently, program evaluation data explains why we get such results, and performance measurement data describes program achievement.

The program measurement policy is made up of two primary parts:

- **Learning outcome assessment:** Course and program learning outcome assessments are both included in learning outcome assessment. Two methods are used to assess program learning outcomes: direct (based on course learning outcome assessment) and indirect (based on surveys conducted from exit students, alumni, and employers).
- **Stakeholder Surveys:** Surveys are conducted by all the major stakeholders of the program shows in **Table-5** below.

Table 5: Stakeholder Surveys

Name of Survey	Timeline of Survey	Respondents	
Student's evaluation of the quality of the course	At the end of every semester	Students of all levels	Internal
Students' satisfaction with the offered services	At the beginning of the third semester	Level 7 or 8 Students	
Students evaluation of quality of learning experience in the program (Final Level Survey)	At the beginning of the second Semester	Level 18 Students	
Graduate employability and enrolment on post-graduate programs	At the end of the third semester	Level 18 Exit Students	
Employer's evaluation of the program graduates proficiency	During the first semester	Employers	External
Graduate employability and enrolment on post-graduate programs	During the first semester	Alumni	
Self-satisfaction rate of faculty	At the end of the second Semester	Employees	

5.6.2. Improvement Plan:

Based on the above-mentioned assessment mechanism, an annual improvement plan is developed while considering the 5 yearly strategic plan and action plan requirements. Specifically, defined performance indicators are used to measure the progress and achievement of the improvement plan. The following **Figure 20** reveals a summary of the Periodic review process cycle.

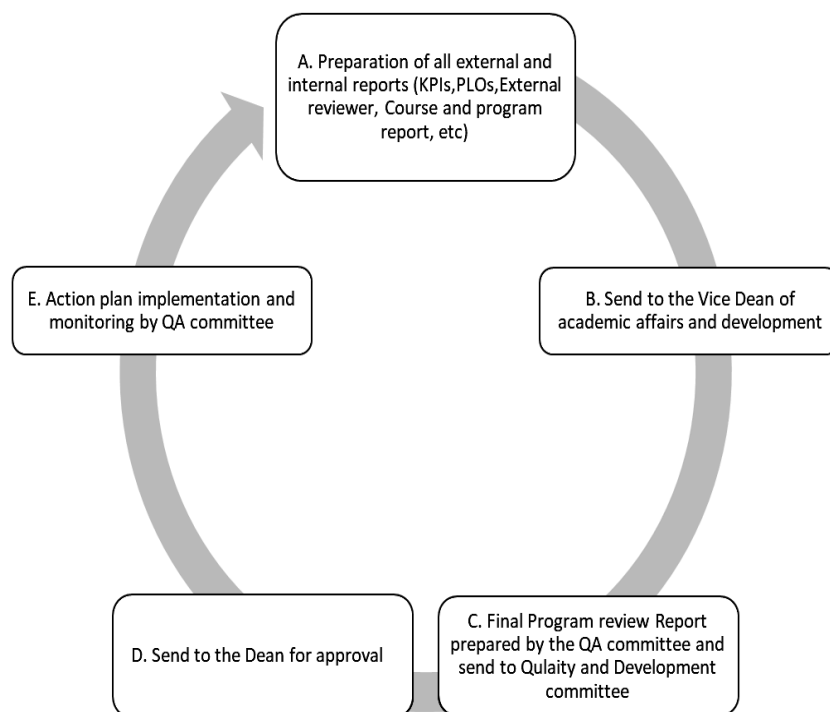


Figure 20: Periodic Review Process

5.7. Assessment Principles & Policy:

5.7.1. Assessment principles:

The program follows the university's recognized principles of ensuring equitable treatment of all students in the evaluation and protecting the standards of its awards within its scope of delivery:

- To guarantee that learning opportunities and assessment strategies meet the needs of students and the curriculum while fostering achievement and advancement.
- The purpose of assessment is to advance learning by determining where each learner is in their learning, making clear what the next learning goal is, and then assisting the learner in achieving that goal.
- Assessment procedures will make sure that testing is not just a one-time event at the conclusion of a unit of work, but rather a multifaceted, collaborative engagement between the teacher and the student that enhances both the student's performance and their capacity to learn how to learn.
- Increasing the variety of assessment methods to include exams, assignments,
- Presentations, oral/interview tests, and projects conducted in person or digitally.

The DIOAR (Design → Implement → Observe → Analyze → Revise) model is shown in **Figure 21** below, and serves as the foundation for the Teaching and Learning Quality Assurance and Improvement process. To enhance students' learning, a design is made for the academic process components at this phase. We are expected to create an Academic Assessment design (AP) for the entire courses, which outlines a roadmap for evaluating the learning outcomes based on their course level.

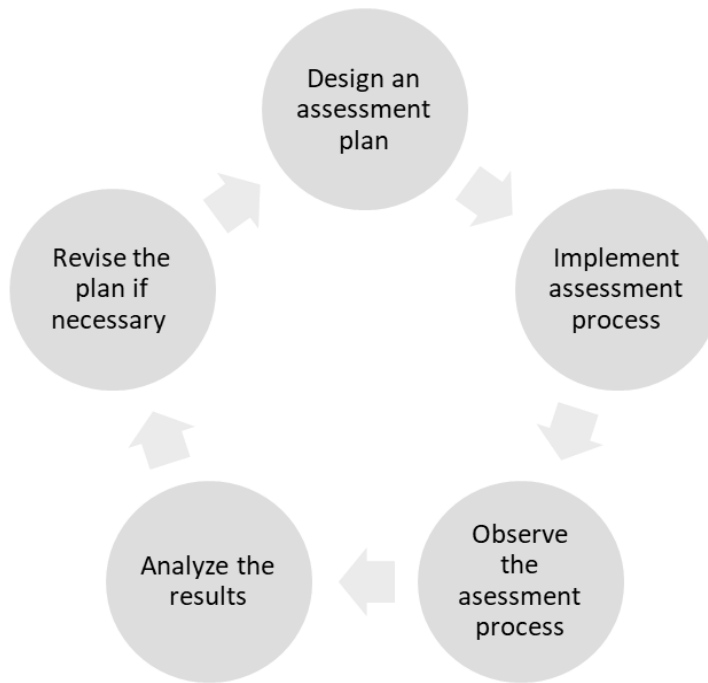


Figure 21: DIOAR model

5.7.2. Assessment policy

This policy is applicable to all academic programs and departments on campus that offer courses that count toward undergraduate or graduate degree programs. It is the methodical and continual process of gathering, examining, and using data from measured outcomes (direct and indirect) to enhance the standards of student learning practices. It differs from an evaluative assessment for a specific course, student, or faculty member.

Course Assessment Process using DIOAR Model

A DIOAR (**Figure 21**) cycle should be included in the course assessment plan to demonstrate the programs' ongoing progress.

5.7.3. CLO Assessment types

An assessment system, derived from the assessment strategy, will often consist of a selection of types of assessment. However, that selection is not commonly made as a result of careful matching with learning outcomes. More often, it results from historical developments, personal

preferences or bias, financial or other resource constraints. Where the selected assessment types do match desired or predetermined learning outcomes, one might consider that the assessment system meets its strategic requirements.

Those who are responsible for establishing assessment systems have a wide choice of types from which to choose. The ultimate decision, however, should depend on fairness to the candidate, so issues of validity and reliability must prevail. At the college of pharmacy, the percent (%) of achievement of CLOs is being measured for each campus separately and combinedly. The calculation method for achievement for each CLO has been updated. Previously, college is used to take the average of achievement in each CLO regardless of the number of marks for that CLO for each assessment(direct). Currently it is a weighted average based on the allocated marks for each CLO (in all assessments). The college has fixed the domain targets to 80% (for knowledge and skills domains) and 85% (for value domain).

5.7.4. Assessment of Program learning Outcome (PLOs):

The main PLOs of the current PharmD program are consistent with NQF program outcomes, where all three learning outcomes are covered. PharmD PLOs are 3 domains (1. Knowledge, 2. Skills 3. Values) for current PLOs adopted in the program.

5.7.5 PLOs Assessment Methods:

The PLOs have been assessed using a variety of methods, such as:

Direct assessment methods include rubric of CLOs/PLOs achievement method, the graduates' results in the Saudi Pharmacist Licensure Examination (SPLE), course grade distributions, annual reports, retention and completion rates.

- ❖ **Rubric of CLOs/PLOs assessment method:** The widely used Microsoft Excel has been used to develop in-house excel method (Excel file, v 3.2-2023) in measuring student's performance through all the approved direct method of assessments of different courses indicated in the specific course specification (CS) of current and PharmD program's PLOs. The information below explains the procedures for obtaining the student's performance quantitatively. After completing all assessments methods and evaluating the student's achievement (%) from adopted CLOs on each course, at first collecting %achievement of

adopted PLOs from each course extracted from the DMA file of the same course. Then calculate average value of each adopted PLO which will reflect the student's performance quantitatively to achieve their educational goals. Note that CLOs are already mapped with PLOs for Pharm D courses and % achievement of each PLO will be calculated based on the weighted average.

- ❖ **Saudi Pharmacist Licensure Examination (SPLE):** The final PLO assessment is the results of our graduates in the Saudi Pharmacist Licensure Examination (SPLE) test. The main objectives of this course are direct assessment method of the college PLOS which includes: **a)** 300 pre-test questions and 300 post-test questions divided as: 10% Basic Biomedical Sciences (30 questions), 35% Pharmaceutical Sciences (105 Questions), 20% Social/Behavioral/Administrative Sciences (60 Questions), 35% Clinical Sciences (105 Questions) based on the intended learning outcomes which are fully aligned/mapped with college PLOs.
- ❖ **Course Grade Distributions:** The grade distribution analysis report is done continually by individual departments in the college to ensure the quality of the courses taught and the achievement of the PLOs.
- ❖ **Retention and Completion rates:** One of the important criteria in the program evaluation process is the calculation of the retention rates and completion rates for students. For example, the retention rate was calculated by taking the total number of first-year students who continued the program into the next year (Level 3) to the total number of first-year students who were registered the same year (Level 1). The following calculation method has been used in this case:

$$\text{Retention rate} = \frac{\text{Students in level 3}}{\text{Students in level 1}} \times 100$$

- ❖ **Course and Annual Program Reports:** The program and course reports were prepared using the NCAAA templates. These reports include several details regarding course issues, analysis, action plan, and priorities for improvement and these are directly related to the PLOs of the programs.

- ❖ **Indirect assessment methods** include stakeholders' feedback obtained through the student experience survey, course evaluation survey, employer surveys, students' evaluation of the quality of their learning experience in the program (program evaluation survey), and an alumni survey.
- ❖ **Student Experience Survey:** The Student experience survey measures the satisfaction and performance of the students regarding academic advising and support, and learning and teaching outcomes which is directly aligned with program learning outcomes (PLOs), mission and vision of the college of pharmacy.
- ❖ **Course Evaluation Survey:** The course evaluation survey was designed to assess student satisfaction and performance regarding the teaching and learning of each course.
- ❖ **Employer Surveys:** A survey that will be sent out on a regular basis will ask employers to review the success of the program's objectives.
- ❖ **The Program Evaluation Survey:** The Program Evaluation Survey is conducted every year to seek students' feedback about various aspects of the program. The survey form was created to evaluate the program's teaching and education aspects.
- ❖ **Alumni survey:** The alumni survey aimed to evaluate the perception of the college's graduates regarding their achievement of the program learning outcomes (PLOs). This survey is an important tool to measure the quality and effectiveness of the program.

5.8. Assessment Evidence and Uses:

There is a wide range of evidence that college of pharmacy have been using when inquiring into student learning. The types of evidence detailed here demonstrate this wide range and cover both direct and indirect measurements. Some evidence can be described through a quantifiable number. This is referred to as quantitative evidence (direct). Other evidence is less easy to quantify. This is referred to as qualitative evidence (indirect). Both types of evidences are used by the college for assessing student performance.

5. 9. Matrix mapping of Program learning outcomes (PLOs) VS Graduate attributes Program mission and goals:

The college of pharmacy has established a strong alignment between the program learning outcomes and all six (6) graduates attributes respectively. In addition, the college has carried out effective alignment with the program mission and goals to ensure that college is providing quality teaching and learning and producing competent professional pharmacy graduates consistently.

The college has developed appropriate strategies and tools for measuring the GA and verifying their achievement accordingly. At the end of the academic year college measure % achievement for each PLO (program learning outcome) accordingly and GAs is already mapped with specific PLOs. So % achievement of each GA will be derived from this mapping. Subsequently all PLOs are already mapped with program mission. At the end % achievement for each program mission based on the % achievement of GAs. This is how GAs are measured to achieve the program mission.

However, the college has also developed another way of measuring achievement of Program goals and objectives accordingly using key performance indicators (KPIs). At the end of the academic year, the college measures the achievement for each KPIs accordingly. KPIs are Program mission are already mapped with specific program goals and objectives. So % achievement of Program goals and objectives will be derived from this mapping.

5.10. Involvement of stakeholders in review process:

Stakeholders survey is an important tool to measure the quality and effectiveness of the program which shows in **Figure 22**.

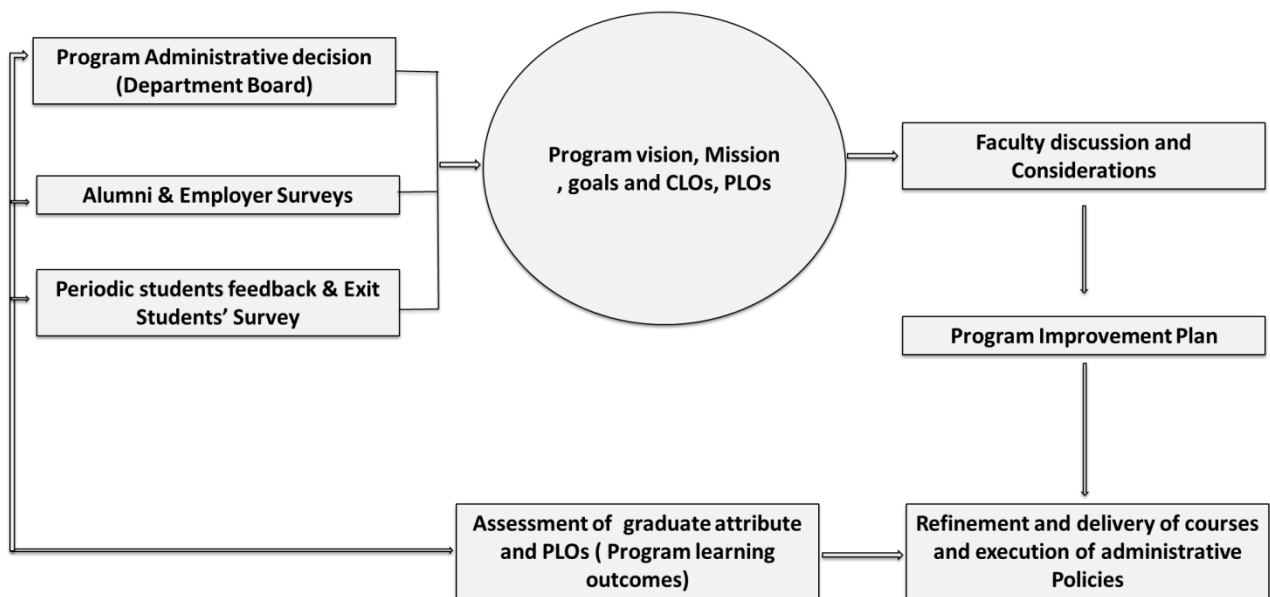


Figure 22: Role of stakeholders in review process

5.11. Course File Review by Quality Assurance Committee.

All the documents defined in the course files are reviewed (Dept Quality & Development committees & another Dept. QA committee members) periodically (semester-wise), and by the Vice Deanship of Educational Services and Development, which is an important aspect for quality assurance at the course and program level. Course instructors are involved in reviewing the various aspects such as lecture notes, lab manuals, etc, while quality assurance representatives will be involved in reviewing the NCAAA documents like course specifications, course reports, CLO assessment, course syllabus, students' grades, and statistical reports, action plans, and academia files. The following **Figure 23** shows the reviewing and approval process of course files.

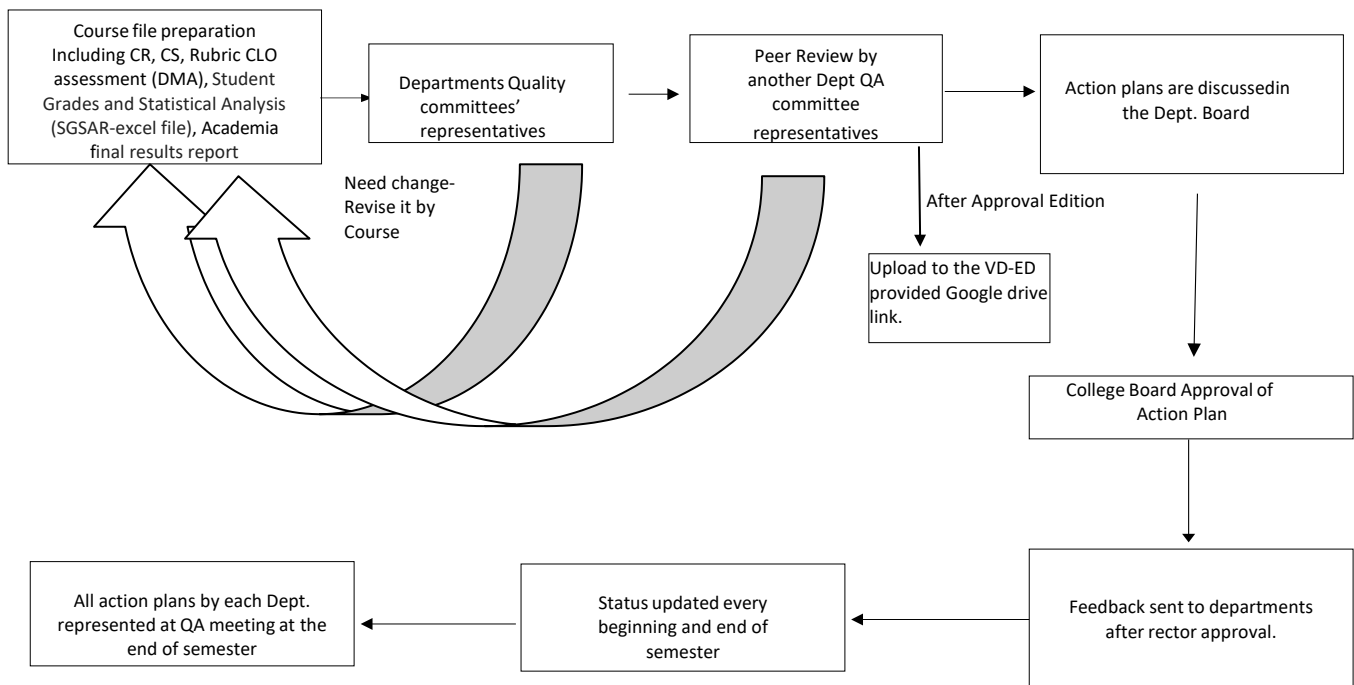


Figure 23: Flow chart of course files review and approval process

5.12 Program Learning Outcomes reviewing Procedures:

The steps for developing an assessment plan include:

1. Reviewing, revising, and/or writing the university, college and program's mission, vision and goals.
2. Reviewing current PLOs.
3. Reviewing any update from Education and Training Evaluation Commission that is related to PLOs.
4. Reviewing the consistency with NQF.
5. Reviewing the benchmark of same program within an accredited institute.
6. Developing LOs for the program based on the Institution Learning Outcomes,
7. University, college and program's mission statement and goals, NQF framework.
8. Classifying the LOs into domains (Knowledge, Cognitive Skills and Values).

9. Aligning the program learning outcomes with program courses, according to the desired levels of performance (I = Introduced P = Practiced M = Mastered).
10. Checklist to self-evaluate the program learning outcomes.
11. Identifying the educational experiences or activities for attaining Los.
12. Identifying measures to assess progress toward meeting your goals.
13. Mapping PLOs to teaching activities & learning assessment and evidence.
14. Identifying the direct and indirect assessment measures.
15. Developing a plan for gathering the data.
16. Gathering and analyzing the assessment results, including the results of other Direct and indirect Measures.
17. Using the data to continuously revise and improve students' educational experiences and activities.
18. Stakeholder's opinions and communicating the results.

Chapter 6

The National Commission for Academic Accreditation and Assessment (NCAAA) Requirements

6.1. NCAAA Standards

In December 2022G (1443H), NCAAA has defined 5 standards for program accreditation.

The key standards are:

- 1. Program management and quality assurance**
- 2. Teaching and learning**
- 3. Students**
- 4. Faculty**
- 5. Learning resources, facilities, and equipment**

These 5 standards are an overall reflection of program achievements and improvement plan described below:

6.1.1: Program Management and Quality Assurance (Standard 1)

The program must have effective leadership that implements the institutional systems, policies, and regulations. The program leadership must plan, implement, monitor, and activate a quality assurance system that achieves continuous development of program performance in a framework of integrity, transparency, and fairness and within a supportive organizational climate.

6.1.2: Teaching and Learning (Standard 2)

Graduate attributes and learning outcomes at the program level must be precisely defined, consistent with the requirements of the Saudi Arabia Qualifications Framework (SAQF) and with the related academic and professional standards, and the labor market requirements. The curriculum must conform to professional requirements. The teaching staff must implement diverse and effective teaching and learning strategies and assessment methods that are appropriate to the different learning outcomes. The extent of achievement of learning outcomes

must be assessed through a variety of means and the results are used for continuous improvement.

6.1.3: Students (Standard 3)

The criteria and requirements for student admissions in the program must be clear and publicly disclosed and must be applied fairly. The information about the program and the requirements for completion of the study must be available, and students must be informed about their rights and duties. The program must provide effective guidance and counseling services, and extracurricular and enriching activities to its students. The program must evaluate the quality of all services and activities offered to its students and improve them. The program must follow its graduates.

6.1.4: Faculty (Standard 4)

The program must have sufficient numbers of qualified teaching staff with the necessary competence and experience to carry out their responsibilities. The teaching staff must be aware of current academic and professional developments in their fields of specialization, participate in research and community service, and in improving the program and institutional performance. Teaching staff performance must be evaluated according to specific criteria, and the results of these evaluations must be used for development.

6.1.5: Learning Resources, Facilities, and Equipment (Standard 5)

Learning resources, facilities, and equipment must be adequate to meet the needs of the program and its courses; and must be available to all beneficiaries using an appropriate arrangement. Teaching staff and students must participate in identifying such resources based on their needs, and in assessing their effectiveness.

6.2. NCAAA Evaluation Scale of the Standards and Criteria

The quality assurance and continuous improvement of educational programs is based on the self-evaluation carried out by the program and its various units based on the quality performance criteria. The faculty and staff responsible for the various activities in the program evaluate the level of performance according to these 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.

6.2.1. Program Self-Evaluation Scale (SESp)

In order to achieve the highest degree of accuracy in the evaluation, NCAAA has developed specific elements that the evaluation processes depend on for all the criteria listed under each standard. The evaluation of the quality level is based on the extent to which the criterion meets its elements, and effectively closes the quality loop (planning, implementation, review, and improvement). The performance evaluation takes into consideration the nature of the criterion, and the existence of practices that demonstrate any aspect of excellence and creativity in the program performance, that is in line with what many programs of higher education have reached and what they aspire to reach.

The elements of evaluation of the criteria are composed of the following:

- ❖ Extent of availability of elements and components of the criterion.
- ❖ Quality level of application for each element.
- ❖ Regularity of application and assessment, and availability of evidence.
- ❖ Continuous improvement and level of results in the light of indicators and Benchmarks.
- ❖ Excellence and creativity in practices of the elements of the criterion.

The evaluations of the program should be based on evidence and indicators of quality, not on unsubstantiated impressions not supported by evidence.

6.2.2. Steps for Evaluation

The quality of the performance is evaluated by evaluating the criterion first, and then evaluating the standard as a whole.

6.2.3. Description of Performance Level

Starting with determining the extent of applicability of the criterion to the program using one of the two options:

Option 1: Not Applicable

That is, the program is not required to apply the criterion because it is not suitable for its nature and activities. If this is the case, the criterion is not counted within the criteria included in the evaluation of the standard.

Option 2: Applicable

That is, the criterion is related to the nature and activities of the program, and it is important to provide it. If this is the case, the criterion is evaluated using a five-point scale (1 to 5).

The quality of performance can be judged by:

I. Unsatisfactory Performance

This includes two levels: (1 and 2), as follows:

Level 1 (Non-Compliance)

There are no or few available elements of the criterion, (or) the elements of the criterion are not applied at all, (or) are applied at a very low level, (or) are rarely applied.

Level 2 (Partial Compliance)

Most of the elements of the criterion are available, (or) the elements of the criterion are applied at a low level (or) are applied irregularly, (or) there is no assessment, or it is there but is irregular, (or) there is insufficient evidence, and there may be some limited improvement procedures.

II. Satisfactory Performance

It includes three levels: (3, 4, and 5), detailed as follows:

Level 3 (Compliance)

All elements of the criterion are available, all of which are applied at a good level and regularly, there is a regular and effective assessment, sufficient evidence is available, and there are regular improvement procedures and good results.

Level 4 (Perfect Compliance)

All the elements of the criterion are available, all of which are applied at a perfect level and regularly, there is a regular and effective assessment, sufficient and varied evidence is available, and there are regular procedures for improvement and higher results compared to previous results.

Level 5 (Distinctive Compliance)

All the elements of the criterion are available, all of which are applied at a distinct level, on a regular basis, there is a regular, effective, and excellent assessment, and various, comprehensive, and cumulative evidence is available, there are regular procedures for improvement and distinct results compared to other programs, and there is creativity in the practices of the elements of the criterion.

The elements used for evaluation at the criterion level can be summarized according to the following **Table 6**:

Table 6: Evaluation at the criterion level

Elements of Evaluation	Unsatisfactory Performance		Unsatisfactory Performance		
	Non-Compliance	Partial Compliance	Compliance	Perfect Compliance	Distinctive Compliance
	1	2	3	4	5
Extent of availability of elements and components of the criterion	There are no Available elements of the Criterion Or there are few Available Elements	Most of the elements of the criterion are available	All of the elements of the criterion are available	All of the elements of the criterion are available	All of the elements of the criterion are available
Quality level of application for each element	The elements of the criterion are not applied at all, (or) are applied at a very low level	The elements of the criterion are applied at low level	The elements of the criterion are applied at good level	The elements of the criterion are applied at perfect level	The elements of the criterion are applied at distinct level
Regularity of application and assessment, and availability of evidence	Rarely applied	Applied irregularly, (or) there is no assessment , or it is there but is irregular, (or) there is insufficient evidence	Applied regularly, There is a regular and effective assessment, Sufficient evidence is available	Applied regularly, There is a regular and effective assessment, Sufficient and varied evidence is available	Applied on a regular basis, There Is a regular, effective, and excellent assessment, and Various, comprehensive, and cumulative evidence is available.
Continuous Improvement and levels of results in the light of indicators and benchmarking	NA	There may be some limited improvement procedure	There are regular improvement procedures and results	There are regular improvement procedures and higher results compared to previous results	There are regular improvement procedures and distinct results compared to other programs

<p>Excellence and creativity in practices of the elements of the criterion</p>					<p>There is creativity in the practices of the elements of the criterion.</p>
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6.2.4. Quality Rating/Level of Standard

The evaluation shall be at the level of the standard as a whole, by collecting the points of evaluation for all the related criteria according to their level of quality. The average shall then be calculated by dividing the sum of these points by the number of the applicable criteria on the program. The performance level of the standard shall be calculated according to the following

Table 7:

Table 7: Quality rating/Level of Standard

Quality rating/Level of Standard		
Level	Overall rating	Average
Distinctive Compliance	Five points	≥ 4.5
Perfect Compliance	Four Points	From 3.5 to < 4.5
Compliance	Three Points	From 2.5 to < 3.5
Partial Compliance	Two Points	From 1.5 to < 2.5
Non-compliance	One Point	< 1.5

No program shall be admitted for accreditation unless it has obtained at least a Compliance level (3 points) in each of the six (6) standards and in each of the essential criteria.

6.3. Program Self-Study Report (SSRp)

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 being achieved are thoroughly analyzed according to the standards for quality assurance and accreditation defined by the NCAAA. A Self-Study Report for Programs (SSRP) should be considered a research report on the quality of the program. It should include sufficient information to inform a reader who is unfamiliar with the program about the process of investigation and the evidence on which conclusions are based to have reasonable confidence that those conclusions are sound.

Conclusions should be supported by evidence, with verification of analysis and advice from others able to offer informed and independent comments. This SSRP should include all the necessary information for it to be read as a complete self-contained report on the program's quality of the program.

6.3.1. Program Self-Study Team

A team of dedicated faculty members works on various self-Study standards under the guidance of the VD-ED.

Responsibilities:

- ❖ Preparing a draft list of evidences for their specific SES standards.
- ❖ Consult the VD-ED, QAC and Q&D.
- ❖ Finalizing the list of evidences.
- ❖ Conduct meetings with concerned responsible committees or persons to finalize the list of evidences.
- ❖ Collect the evidences and evaluate the practices on a 0-5 scale as per the NCAAA guidelines.
- ❖ Identify strengths, aspects of improvement and list of priorities that need immediate attention for improvement.
- ❖ Identify list of evidences required for KPIs related with specific standard of SES and help KPI in-charge in analysis of KPIs.
- ❖ Writing SSRp report for specific standard.
- ❖ Preparing cover letters for specific SES sub standards and uploading of evidences on DAD/ NCAAA systems as per guidance from QAU head.

6.3.2. Procedure for completing the SES tasks

Step1: Preparing a draft list of evidences required for their specific SES standards as per

Table 8:

Output: List of evidences in **Table 8**

Table 8: Procedure for completing the SES tasks- List of evidences

S. No.	Quality Practices	List of Evidences

❖ **Step 2:** Consult the VD-ED, QAC and Q&D for finalizing the list of evidences.

Output:

- ❖ Minutes of the Meeting
- ❖ Draft list of evidences and responsibility in attached **Table 9**.

Table 9: Procedure for completing the SES tasks- List of evidences & Responsibilities

S. No.	Quality Practices	List of Evidences	Name of Responsible Committee/Person

Step 3: Conduct meetings with responsible committees or persons to finalize the list of evidences.

Output:

- Minutes of the Meeting
- Finalized list of evidences and responsibility in attached Table 10.

Step 4: Collect the evidences and evaluate the practices on a 0-5 scale as per the NCAAA Guidelines.

Output: The SES evaluation Table 8 based on the NCAAA guidelines provided in Self-Evaluation Scales for Higher Education guide.

Table 10: SES evaluation based on the NCAAA guidelines

Level of Evaluation Elements of Evaluation		NA	Unsatisfactory		Satisfactory		
			Non-compliance	Partial Compliance	Compliance	Perfect Compliance	Distinctive Compliance
			1	2	3	4	5
SES No.	Details of Quality Practices						
Overall Evaluation of the Standard							
Total Sum of Evaluation of Criteria (Total Sum of Points)							
Number of Applicable Criteria							
Average Evaluation of the Standard							
Overall Quality Rating of the Standard							

Step 5: Identify the list of evidences required for KPIs related with specific standard of SES and help KPI in-charge in analysis of KPIs.

Output: KPIs report.

Step 6: Identify strengths (based on list of quality practices being done exceptionally well); aspects require improvement and list of priorities that need immediate attention for improvement and write a report on it.

Output: Details of strength, aspects of improvements, and priorities in **Table 10** above.

Table 11: Details of strength, aspects of improvements, and priorities related to specific SES standard:

SES Standard
Strengths:
Aspects of Improvement: (Based on SES rating, where SES rating less than 3)
Priorities for improvement: (The practices that need immediate attention)
Analysis and Comments:

Step 7: Prepare the improvement plan in consultation with responsible committees and higher authorities (if required).

Output: Improvement Plan in **Table 12**.

Table 12: Improvement Plan

#	SES Standard/ Practice	Action needed	Responsible	Start Date	End Date	Evidence	Remarks (If any)

Step 8: Writing SSRp report for specific standard based on NCAAA SSRp template.

6.3.3. Program NCAAA Self Study Working Flow Chart showing in Figure 24.

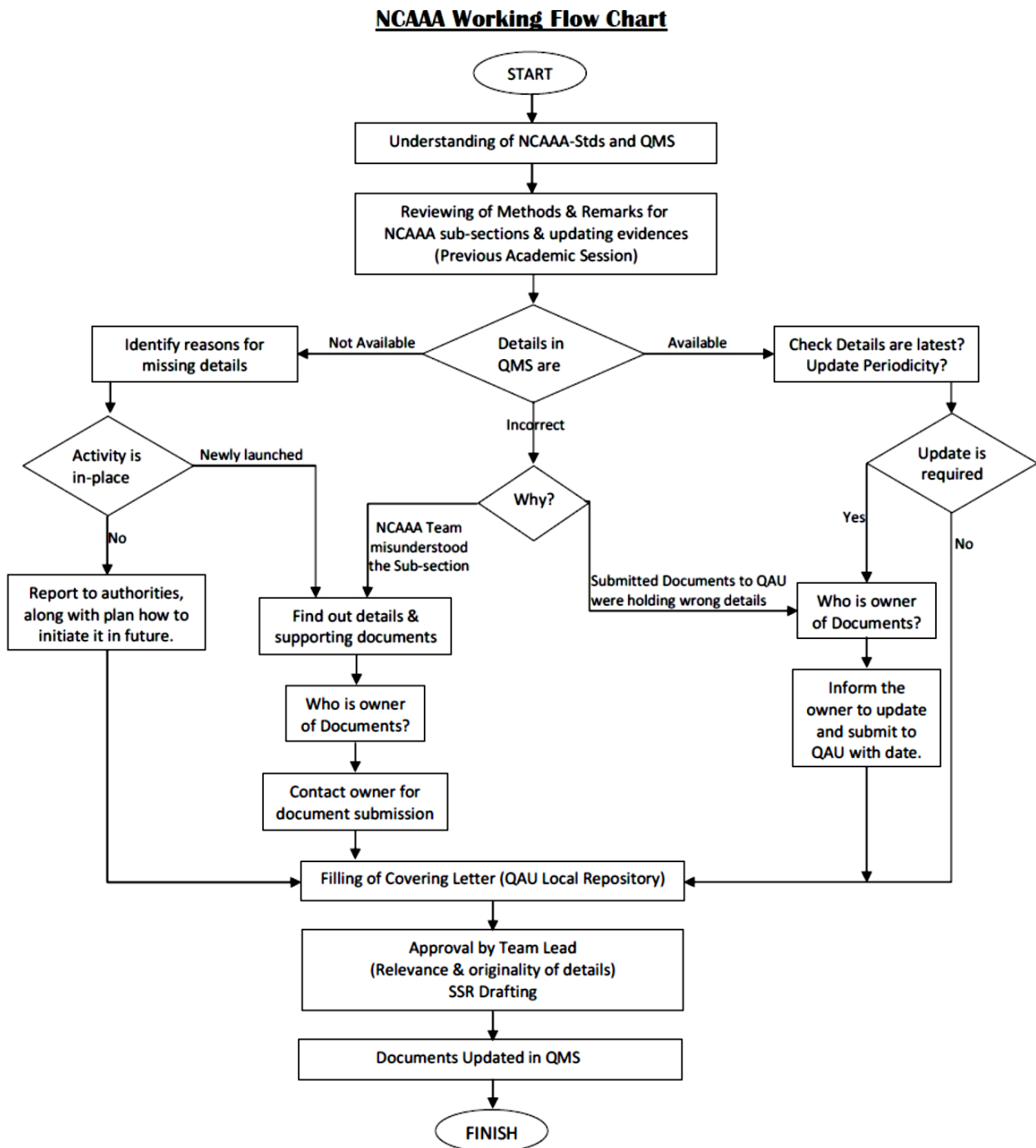


Figure 24: Program NCAAA Self Study Working Flow Chart

6.4. Program Eligibility Criteria

Program eligibility criteria are shown in Table 13 below:

Table 13: Eligibility Requirements for Program Accreditation

Eligibility Requirements		Required Evidence
1	Program final licensing or establishment decision	<ul style="list-style-type: none"> • Decision to establish the program (for public institutions) • Final program licensing decision (for private institutions)
2	Consistency with Saudi Arabia qualifications framework (SAQF)	A report on program consistency with the Saudi Arabia Qualification framework (SAQF)
3	Availability of the institutional accreditation requirements	Accredited institution or the institution met the eligibility requirements (review visit has been scheduled)
4	Student and staff manuals	Student and staff manuals including: <ul style="list-style-type: none"> • Program Handbook • Admission and Registration • Study Regulations and Tests • Guidance and Counselling Services • Rights and Duties • Complaints and Grievances
5	Program's quality assurance system and its performance reports	<ul style="list-style-type: none"> • Program's quality system manual. • A manual of policies and procedures for approving, modifying, and reviewing academic programs and courses. • Annual program report for the last two years according to NCAAA Templates. • Program's course reports for the last two years (One report for each course per year). • A report on the results of stakeholders' surveys (students, alumni, employers, teaching staff, employees) for the last two years.
6	Program and courses specifications	<ul style="list-style-type: none"> • Program specifications according to NCAAA Templates • Course specifications for all courses classified according to levels
7	Program learning outcomes assessment plan and reports	<ul style="list-style-type: none"> • Program learning outcome assessment Plan • Program learning outcome assessment reports
8	Students graduated (One cohort at least)	A report on the number of graduated cohorts and the number of students in each cohort
9	Program advisory committee	<ul style="list-style-type: none"> • Composition and functions of the Committee. • Report on the Committee's performance and outcomes.
10	Key performance	• A report on program's key performance indicators'

	indicators and Benchmarking	measurement and benchmarking for the last three years
11	Program self-study	<ul style="list-style-type: none"> • Program self-evaluation scales (taking into consideration that the level of evaluation is not less than three points for each of the main criteria identified by the Centre and for each standard). • Program self-study report Evidence for the self-study reports.
Additional requirements for Postgraduate Programs		
12	Operational plan for Scientific research and its follow-up	<p>Operational Plan for scientific research in the program (depending on the nature of the program)</p> <ul style="list-style-type: none"> • System for monitoring and documenting the scientific research activities of the program. • Periodic performance reports of the scientific research plan
13	Scientific supervision system on theses, projects, or vocational training	<ul style="list-style-type: none"> • Guides, regulations, and procedures for scientific supervision of theses, projects or vocational training • Follow-up scientific supervision reports in the program

6.5. Program Accreditation Steps:

Table 14: Program Accreditation steps	
Step 1	The Standing Committee for Academic Accreditation, based on a detailed report by the Quality Assurance Committee (Deanship of Academic Development), identifies the most advanced academic programs to obtain program accreditation based on the main evaluation and accreditation plan
Step 2	The Dean of the College shall direct the Program Committee for Evaluation and Accreditation to prepare the self-study in accordance with the standards of the local or international accreditation body.
Step 3	The Program Committee for Evaluation and Accreditation shall submit the eligibility documents and supporting documents through the Head of Department to the College Committee for Accreditation for review
Step 4	After the review, the Dean of the College shall submit the eligibility documents and supporting documents of the Quality Assurance Committee (Deanship of Academic Development) for review within one month to ensure that they comply with the standards of the accreditation body.
Step 5	The Quality Assurance Committee sends a report of the evaluation and the result of the review to the Dean of the College and a copy to the Standing Committee of the Academic Accreditation Committee
Step 6	If all requirements are completed, a team assigned by the Quality Assurance Committee shall make an initial visit to verify all requirements and submit a final report to the Standing Committee of the Academic Accreditation Committee to decide on sending the documents to an external auditor for independent opinion.
Step 7	Communicate with the accreditation body and sign the accreditation contract.
Step 8	The Program Committee shall provide and process all documents required for accreditation in accordance with the requirements of the accreditation body, and then send to the accreditation body to meet the requirements of its schedule.

Step 9	In cooperation between the dean of the college and the quality assurance committee, the visit of the accreditation team is planned and arrangements are coordinated.
Step 10	The accreditation team site visits will be conducted, the report and results are presented at a meeting attended by the Vice President for Development and Entrepreneurship, the Dean of the College concerned, the Dean of Academic Development, the members of the Quality Assurance and Program Committee.

6.6. Program Key Performance Indicators (KPIs):

Program follows the 17 KPI's provided by NCAAA, in addition to 7 specific KPIs.

Table 15: Program Key Performance Indicators (KPIs) check the latest table

Standard	KPIs Code	Provided by	KPIs
Standard 1. Mission and Goals	KPI-P-01	NCAAA	Percentage of achieved indicators of the program operational plan objectives
	KPI-P-02	College of Pharmacy, KKU	Stakeholders' awareness ratings of the mission statement and goals
	KPI-P-22		Proportion of full-time teaching and other staff actively engaged in community service
	KPI-P-23		Proportion of students actively engaged in community service
	KPI-P-24		Average score of both research course in the program and the obligatory research rotation for the pharmacy intern students.
Standard 2. Program Management and Quality Assurance	KPI-P-03	College of Pharmacy, KKU	Satisfaction of the faculty regarding the program management and quality assurance
	KPI-P-04		Self-evaluation rate of faculty
	KPI-P-05		Self-satisfaction rate of faculty
Standard 3. Teaching and Learning	KPI-P-06	NCAAA	Students evaluation of quality of learning experience in the program
	KPI-P-07		Student's evaluation of the quality of the course
	KPI-P-08		Completion rate
	KPI-P-09		First-year students retention rate
	KPI-P-10		Students performance in national and /or proficiency examinations
	KPI-P-11		Graduate employability and enrolment on post-graduate programs
	KPI-P-12		Average number of students in the class

	KPI-P-13		Employer's evaluation of the program graduates proficiency
Standard 4. Students	KPI-P-14	NCAAA	Students' satisfaction with the offered services
Standard 5. Teaching Staff	KPI-P-15	NCAAA	Ratio of the total number of students to the total number of full-time and full-time equivalent teaching staff in the program
	KPI-P-16		Percentage of teaching staff distribution based on gender, branches, and academic ranking
	KPI-P-17		Proportion of teaching staff leaving the program annually for reasons other than age retirement to the total number of teaching staff
	KPI-P-18		Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program
	KPI-P-19		Total number of published research in refereed journals in the previous years per full-time faculty members
	KPI-P-20		Citations rate in refereed journals per full-time faculty member (ratio of the total number of citations in refereed journals to the total research published).
Standard 6. Learning Resources, Facilities, and Equipment	KPI-P-21	NCAAA	Satisfaction of the beneficiaries with the facilities and equipment

6.7. Benchmarking:

Benchmarking is a popular method for developing requirements and setting goals. The essence of benchmarking is the continuous process of comparing an organizational strategy, products, processes with other organizations / institutions best-in-class. Benchmarking is a continuous process where you measure your programs success against other similar program of under Universities/ Institutions to discover if there is a gap in performance that can be closed by improving your performance. The purpose is to learn how they achieved excellence, and then setting out to match and even surpass it.

Target benchmarks and internal benchmarks have been developed, with comprehensive analysis of the data to improve performance wherever it is needed. The KPIs are analyzed using appropriate statistical tools, and the process is guided by a consistent KPI driving approach. The college of pharmacy followed the University's requirements for selecting internal and external benchmarks, as well as suitable partners. For internal benchmarking, the program's trend data from the previous year (the previous two years' data) was picked to highlight the program's improvement and pitfalls (if any).

Due to the availability of data, the college data for the previous two years was used as internal benchmarking for some of the KPIs, and it offered a reasonable reflection on the program's success and improvement.

6.7.1. Benefits of Benchmarking

What benefits have been achieved by the organizations / institutions that have successfully completed their benchmarking programs?

These are the sets of benefits:

- ❖ Creating a culture that values continuous improvement to achieve excellence.
- ❖ Inculcates constant comparison, competition and collaboration.
- ❖ Discover performance gaps to identify areas for improvement.
- ❖ Prioritizing the areas that need improvement.
- ❖ Develop new ideas and standardized approaches for accomplishing old tasks.
- ❖ Continuous improvement of quality.

6.7.2. Basic Benchmarking Methodology

Plan:

I. What to benchmark?

- ❖ Identify critical processes.
- ❖ Collect internal data for comparison (how performance measure; Understand strengths and weaknesses of current process).

II. Who to benchmark?

- ❖ Internal Units (comparison within an institution).

- ❖ Other Colleges and Universities (comparison across institutions).
- ❖ Functional Comparisons (across diverse settings - higher education, corporate, industry, etc.).
- ❖ Best in Class (compare with exceptional performers).

Implement:

III. Collect data

- ❖ Collect comparative data (qualitative/ quantitative).
- ❖ Calls, surveys, site visits, interviews, review of websites.
- ❖ Systematic collection.

Analyze:

IV. Analyze data

- ❖ Gap between performances (Are others better? Why are they better?).
- ❖ New strategies/ practices for adoption (What practices could we adapt and adopt?).

Act:

V. Implement improvements

- ❖ Action plan for change.
- ❖ Implement changes.
- ❖ Measure results for effectiveness.

6.7.3. Program Plan for Benchmarking:

PharmD Program of the College of Pharmacy have analyzed and reviewed colleges offering PharmD program of different universities. The PharmD program of the College of Pharmacy, Al Qassim University, Qassim, Kingdom of Saudi Arabia has been used as an external benchmark and requested for official approval in this regard due to following reasons:

- ❖ Al Qassim University's PharmD program was the first pharmacy program in the Kingdom to receive NCAAA accreditation in addition to the ACPE Certificate.
- ❖ The College of Pharmacy at Al Qassim University was formed about at the same time as the College of Pharmacy at King Khalid University.
- ❖ Infrastructure, student population, faculty, and resource comparability between two

institutions were nearly same.

- ❖ Due to similarity in regional and cultural attributes.

6.8. Quality Improvement Initiatives

Quality Assurance committee at the College of Pharmacy do the following tasks for quality improvement:

- ❖ Spreads the culture of quality and the needs for improvement among faculty members and students.
- ❖ Contributes to the achievement of all college objectives relating to quality and academic accreditation.
- ❖ Works with the teams to develop and refine KPIs at the college level.
- ❖ Provides support to all units and departments within the college towards achieving high quality in all activities.
- ❖ Reviews progress and evaluates the performance of the quality committees in academic and administrative units.
- ❖ Contributes toward strategies for evaluating performance and quality assurance.
- ❖ Reviews quality standards to ensure continuous improvement at all levels.
- ❖ Provides consultation regarding strategies and priorities of quality enhancement.
- ❖ Manage quality assurance through the assigned committees.
- ❖ Compile a manual for the management of quality assurance and outcomes assessment.

References:

- [1] NCAAA Standards for Program and Institution.
- [2] SES for Program and Institution.
- [3] SSRp Template of NCAAA.
- [4] King Khalid University QMS Handbook.
- [5] NCAAA website.
- [6] NCAAA Handbook-for-Quality-Assurance.
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- [8] SAQF Framework Registration Standards.
- [9] Handbook: Program Quality Management System, Jazan University.