Program quality system manual

Master of Pharmaceutical Sciences
"Assessment and Applications of Phytotherapeutic Drugs"
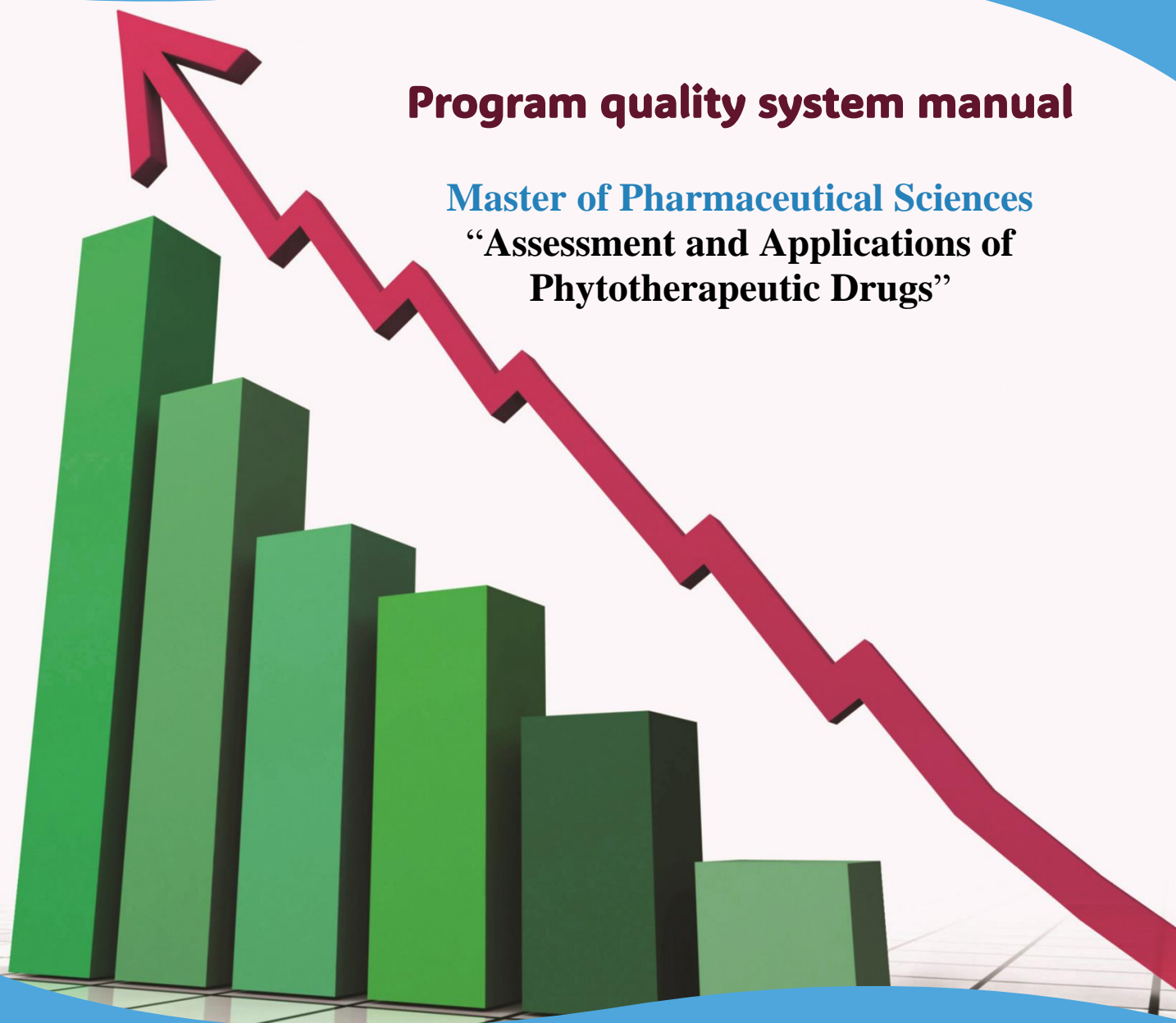
Version 1.0, January 2024

جامعــــة الأمـــيـــر سطام بن عبدالعزيز
PRINCE SATTAM BIN ABDULAZIZ UNIVERSITY

Department of Pharmacognosy – College of Pharmacy

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1. Introduction

1.1. Introduction to the Quality Guide

The quality assurance system of an educational program plays a significant role in ensuring that the program meets the established standards of excellence and consistently delivers a high-quality of education experience. It encompasses a range of processes, procedures, and assessments that are designed to monitor and enhance the program's effectiveness, relevance, and overall quality. By implementing a robust quality assurance system, institutions can ensure that their programs meet the needs and expectations of students, employers, and other stakeholders. This system typically involves curriculum design and review, faculty selection and development, student assessment and feedback mechanisms, industry collaborations, and accreditation processes. Through these measures, the quality assurance system promotes continuous improvement, accountability, and transparency, ultimately contributing to the program's reputation and the success of its graduates.

1.2. Program Mission Statement

"This program aims to prepare distinguished graduates with a high degree of knowledge in the field of phytotherapy and phytopharmaceutical assessment that contribute effectively to academic environment, scientific research, and community needs".

1.3. Program Goals

- Preparing remarkable graduates with specialized qualifications and skills in the field of phytotherapeutic drugs to compete in the labor market.
- Developing research skills of graduates to produce impactful scientific research locally and internationally.
- Enhancing graduates' capacity to uphold ethical values, demonstrate social responsibility, and foster sustainable educational advancement.

1.4. Program Objectives

- Equipping students with in-depth knowledge to recognize and predict the composition, pharmacological properties, mechanisms of action, and therapeutic applications of phytotherapeutic drugs.
- Providing students with the skills to assess and evaluate the safety, efficacy, and quality of phytotherapeutic drugs.
- Supplying students with specialized qualifications and the skills to apply and assess herbal medicines and phytopharmaceuticals, thus enriching professional performance in all fields, including pharmaceutical and research fields.
- Enhancing students' research competencies, scientific writing abilities, commitment to lifelong learning, ethical practices, and social responsibility.
- Ensuring continuous enhancement of teaching and learning processes for optimal educational outcomes.

1.5. Graduates Attributes and Competencies

The graduates of the program are expected to:

A. In-depth knowledge with a comprehensive understanding of the principles, theories, and practices related to phytotherapeutic drugs.
B. Demonstrate research skills, including experimental design, literature reviews, analysis, interpretation of results, understanding of the ethical considerations related to phytotherapeutic drugs.
C. Foster a commitment to lifelong learning and professional development by providing graduates with the skills and motivation to stay updated with the latest advancements in the field.
D. Display experience in applying various analytical and laboratory techniques in the assessment of phytotherapeutic drugs, such as chromatography, spectroscopy, and bioassay methods for evaluating the potency and safety.

E. Exhibit a deep understanding of the pharmacological and toxicological properties of phytotherapeutic drugs and evidence-based approaches enabling them to contribute effectively to the improvement of healthcare in the society.
F. Develop critical thinking skills and problem-solving skills, allowing them to propose innovative solutions to challenges in the field.
G. Show communication and presentation skills and capability to convey scientific information in both written and oral formats.
H. Work effectively in multidisciplinary teams and show adaptability to new situations by collaborating with other researchers, healthcare professionals, industry stakeholders.

1.6. Organizational Chart

An organizational chart of an academic program typically illustrates the hierarchical structure and relationships within the program. It outlines the roles, responsibilities, and reporting lines of administrators, faculty, and other key personnel involved in the program. This visual representation helps to clarify the chain of command, communication channels, and decision-making processes within the academic program. The organizational chart of the program is illustrated in **Figure 1**.

Organizational structure Graphical design for the Master of Pharmaceutical Sciences Program, "Assessment and Applications of Phytotherapeutic Drugs"

- ➢ **Vice-Rectorate of Graduate Studies and Scientific Research**
  - ○ **Dean of Postgraduate Studies**
    - ▪ **College Council**
      - ❖ **Vice-dean for Graduate Studies, Research, and Quality**
        - ○ **Graduate Studies and Research Committee**
        - ○ **Pharmacognosy Department Council**
          - ▪ **Council Secretariat**
          - ▪ **Head of Department**
          - ▪ **Program Coordinator**
          - ▪ **Committees**
            - ✓ **Program Advisory Committee**
            - ✓ **Academic Advisory and Alumni Committee**
            - ✓ **Research, Resources, and Community Committee**
            - ✓ **Assessment and Accreditation Committee**
   - ✓ **Surveys Committee**
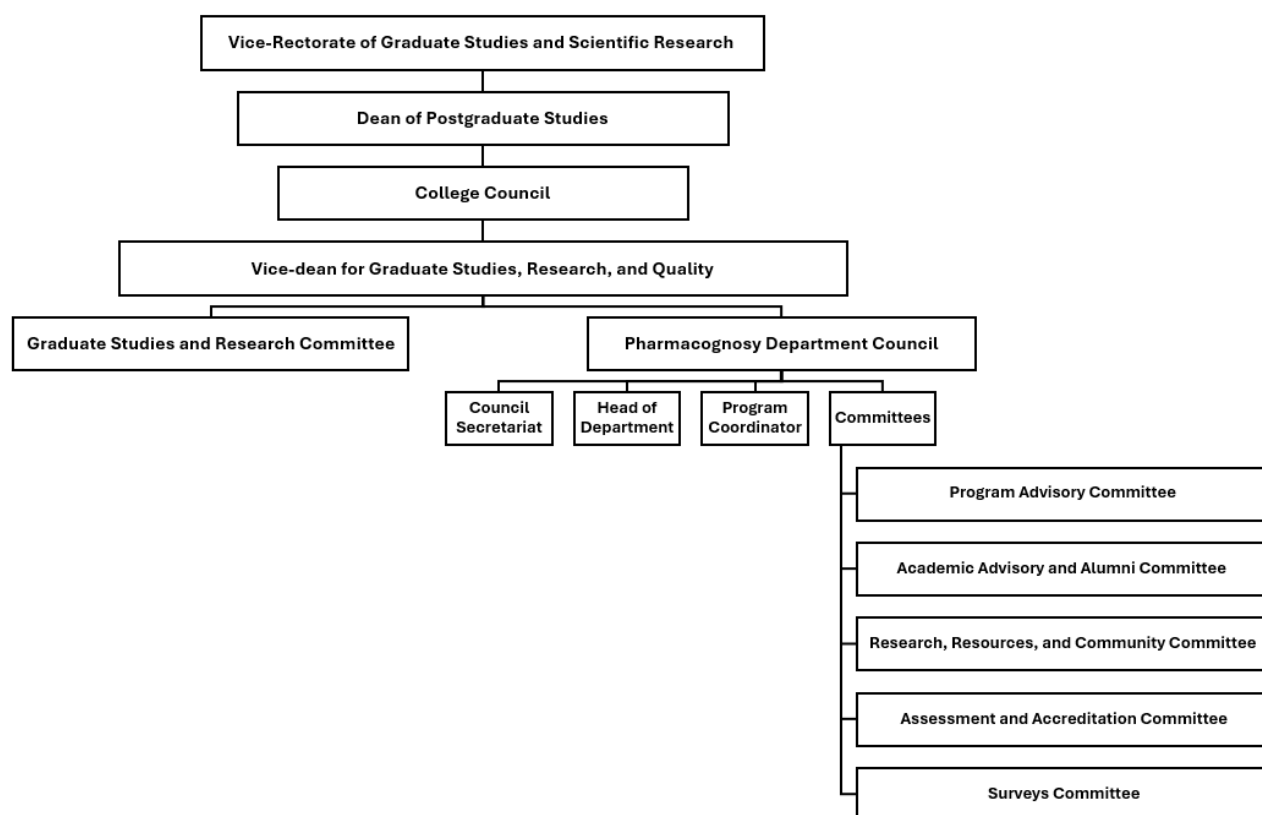
Figure 1. Organizational Structure of the Program.

1. **Vice-Rectorate of Graduate Studies and Scientific Research**

- Supervising the plan and programs for graduate studies and scientific research and the steps to implement them, and working to organize the methods of providing research services in accordance with what is stipulated in the system and the regulations of the Council of Education and Universities.

- Adopting an annual plan for the university's scientific research priorities and preparing the necessary draft budget for it.

- Recommending that faculty members attend conferences, seminars, and the like.

- Approving the disbursement of financial rewards to those assigned to discuss scientific theses at the university.

2. **Dean of Postgraduate Studies**

- Preparing postgraduate studies programs according to the capabilities and needs of the labor market in cooperation with the college, implementing the necessary regulations for them, making appropriate recommendations regarding them, and submitting them to the Vice President for Postgraduate Studies and Scientific Research.

- Determine the number of postgraduate students who can be accepted for each semester or academic year and the admission dates and announce them in coordination with the college in preparation for approval by the authorized person.

- Organizing the rules for admission, registration, study, and signing of transcripts and temporary certificates issued to male and female students studying and graduates in graduate programs at the university based on the recommendations of the dean of the college.

- Prepare a budget for graduate studies and related research and work to include it in the budget.

3. **College Council and the dean**

   A) College Council:

- Approving new master's programs or any changes or modifications to the existing programs.

- Addressing any issues or concerns related to the master's program within the college, and working to resolve them in a timely manner.

- Collaborating with department heads, faculty members, and other stakeholders to ensure the success and growth of the master's program.

   B) Dean:

- Providing overall leadership and strategic direction for the college, including overseeing the master's program.

- Supporting department heads and faculty members in the development and delivery of the master's program curriculum.

- Managing administrative tasks related to the master's program, such as admissions, student enrollment, and program evaluation.
- Providing guidance and support to students, faculty, and staff involved in the master's program to foster a positive learning environment and academic success.

4. **Vice-dean for Graduate Studies, Research, and Quality**

- Contributing to the strategic planning and development of postgraduate and research priorities within the college to ensure alignment with the overall mission and vision of the institution.
- Overseeing and coordinating all aspects of the master's program graduate within the college.
- Developing and implementing policies and procedures related to graduate studies, research, and quality assurance.
- Collaborating with department heads, faculty members, and other stakeholders to enhance the quality and relevance of the master's program.
- Overseeing the implementation of quality assurance measures to continuously improve the effectiveness and efficiency of the master's program and research activities.

5. **Graduate Studies and Research Committee**

- Developing and reviewing policies and procedures related to the master's program and research.
- Reviewing and assessing research proposals to ensure they meet the standards and expectations set by the college.
- Facilitating collaboration and interdisciplinary research initiatives among faculty members and graduate students within the college.
- Supporting and advocating for resources, funding, and opportunities for the master's program.

6. **Pharmacognosy Department Council**

- Discussing the admission criteria and enrollment goals for the master's program, advocating for student needs, concerns, and experiences within the master's program .
- Providing input on academic matters, curriculum development, research initiatives, and other departmental issues.
- Committees' representatives coordinate and participate in discussions related to their committees.
- Addressing issues related to student support services, academic advising, career development, and extracurricular activities to create a welcoming and supportive learning environment.
- Discusses research opportunities and funding sources within the master's program.
- Assisting in promoting research excellence and innovation among students and faculty.
- Monitoring and evaluating the effectiveness of the master's program, including student learning outcomes, program goals, and assessment methods.

- Assisting in data collection, analysis, and reporting to ensure continuous improvement and quality assurance.
- Organizing workshops, seminars, and events to enhance the faculty's teaching and research skills.

7. **Council Secretariat**

- The secretary is responsible for documenting meeting minutes, maintaining records, and handling correspondence related to the council's activities.

8. **Head of Department**

- Leads and facilitates meetings, sets the agenda, and ensures that the council operates effectively and efficiently.
- Serving as the primary connection between the council and department faculty/staff.
- Managing administrative tasks related to admissions, student enrollment, and program budgeting.
- Developing and implementing academic policies and procedures related to the master's program.
- Supervising and supporting faculty members involved in teaching master's level courses.
- Monitoring the program's performance, ensuring compliance with accreditation standards, regulatory requirements, and best practices.
- Representing the department in meetings, conferences, and other academic events related to postgraduate studies.

9. **Program Coordinator**

- Monitoring the development and updating of the master's program curriculum, ensuring alignment with industry standards and academic requirements.
- Ensuring compliance with academic standards and regulations set by accrediting bodies.
- Supporting and mentoring graduate students in their academic and research endeavors, providing guidance and resources for their success.

1.7. About the Department of Pharmacognosy

The Department of Pharmacognosy is concerned with studying drugs derived from various natural sources, such as plants and other organisms, including microorganisms, marine organisms, as well as animals, and others. The department aims to provide students with the necessary skills, starting with the methods of collecting drugs, drying, and storing them, separating their components, studying their chemistry, identifying them, their biosynthesis, applications for their use in pharmaceutical preparations, quality control, studying their toxicity and potential interactions with other drugs.

1.7.1. Head of the Department

Mohammed Hamed Saeed Alqarni

Head of Pharmacognosy Department - College of Pharmacy
Prince Sattam bin Abdul-Aziz University, Saudi Arabia, Al-Kharj
Associate Professor

⚲ Al-Kharj ☏ 011-588-6011 ✉ m.alqarni@psau.edu.sa

Qualifications:
- PhD. School of Pharmacy - University of Pittsburgh
- B.S. School of Pharmacy- King Saud University, Saudi Arabia

1.7.2. Faculty members

No.	Name	Gender	Nationality	Degree	Academic rank
1.	Mohammed H. Alqarni	Male	Saudi	Ph.D.	Assoc. professor & Head of Department
2.	Maged S. Abdel-Kader	Male	Egyptian	Ph.D.	Professor
3.	Fatma M. Abdel Bar	Female	Egyptian	Ph.D.	Professor
4.	Prawez Alam	Male	Indian	Ph.D.	Professor
5.	Ahmed I. Foudah	Male	Saudi	Ph.D.	Professor
6.	Ahmed A. Ashour	Male	Egyptian	Ph.D.	Assoc. professor
7.	Mohammad K. M. Ali	Male	Indian	Ph.D.	Assoc. professor
8.	Wadah G. Osman	Male	Sudanese	Ph.D.	Assist. professor
9.	Tariq M. Aljarba	Male	Saudi	Ph.D.	Assist. professor
10.	Asmaa E. Sherif	Female	Egyptian	Ph.D.	Assist. professor
11.	Mohamad Ayman Salkini	Male	Syrian	MSc.	Lecturer
12.	Aftab Alam	Male	Indian	MSc.	Lecturer
13.	Shrouq H. Sweilam	Female	Egyptian	MSc.	Lecturer
14.	Fatimah I. Qassadi	Female	Saudi	MSc.	Lecturer - Scholarship
15.	Renad A. Albar	Female	Saudi	MSc.	Lecturer - Scholarship
16.	Noura K. Alowaifi	Female	Saudi	MSc.	Lecturer - Scholarship

1.7.3. Websites of Academic Faculty Members On-Campus

No.	Name	Websites
1.	Mohammed H. Alqarni	https://faculty.psau.edu.sa/ar/psau/facultymember/m.alqarni
2.	Maged S. Abdel-Kader	https://faculty.psau.edu.sa/ar/psau/facultymember/m.youssef
3.	Fatma M. Abdel Bar	https://faculty.psau.edu.sa/ar/psau/facultymember/f.abdelbar
4.	Prawez Alam	https://faculty.psau.edu.sa/ar/psau/facultymember/p.alam
5.	Ahmed I. Foudah	https://faculty.psau.edu.sa/ar/psau/facultymember/a.foudah
6.	Ahmed A. Ashour	https://faculty.psau.edu.sa/ar/psau/facultymember/ahmed.mohamed
7.	Mohammad K. M. Ali	https://faculty.psau.edu.sa/ar/psau/facultymember/m.khalid
8.	Wadah G. Osman	https://faculty.psau.edu.sa/ar/psau/facultymember/w.osman
9.	Tariq M. Aljarba	https://faculty.psau.edu.sa/ar/psau/facultymember/t.aljarba
10.	Asmaa E. Sherif	https://faculty.psau.edu.sa/ar/psau/facultymember/ae.sherif
11.	Mohamad Ayman Salkini	https://faculty.psau.edu.sa/ar/psau/facultymember/m.salkini
12.	Aftab Alam	https://faculty.psau.edu.sa/ar/psau/facultymember/a.alam
13.	Shrouq H. Sweilam	https://faculty.psau.edu.sa/ar/psau/facultymember/s.sweilam

2. Program Committees

2.1. Assessment and Accreditation Committee

The Assessment and Accreditation Committee is responsible for evaluating program effectiveness, ensuring compliance with accreditation standards set by the NCAAA, and driving continuous improvement efforts to enhance the quality of the program. The ccommittee performs a series of steps to ensure quality and compliance. These include evaluating curriculum, conducting assessments, monitoring student progress, and coordinating accreditation processes.

- Mission, Goals, and PLOs
- Program design and setting all strategies
- Evaluate the effectiveness of the program
- Improve the program based on assessment results

Plan — Do — Assess — Act
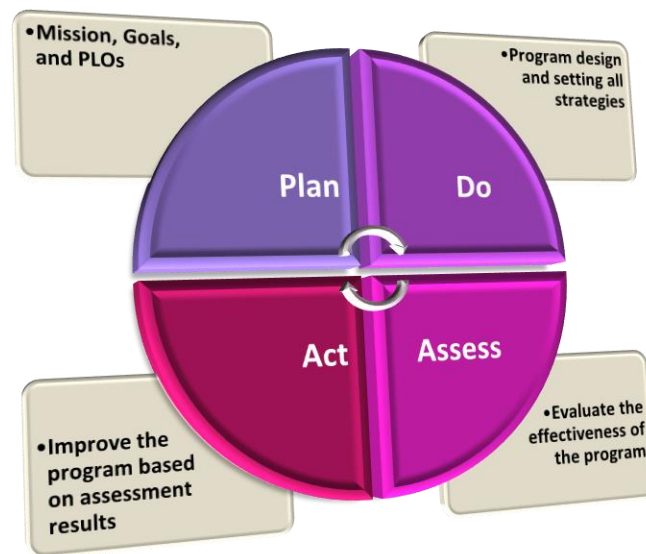
Chart 2. Summary of the program quality cycle adopted by the Assessment and Accreditation Committee.

A detailed list of responsibilities of the Assessment and Accreditation Committee is summarized as follows:

Responsibilities of the Assessment and Accreditation Committee

1. **Conducting program assessment:** Implementing assessment processes to evaluate the program's learning outcomes (PLOs), curriculum effectiveness, and student performance. This involves developing assessment plans, collecting data, and analyzing the results.
2. **Ensuring compliance with accreditation standards:** Ensuring that the program meets the accreditation standards set by the NCAAA. This includes reviewing the program's curriculum, faculty qualifications, resources, and facilities to ensure they align with the accreditation criteria.
3. **Preparing self-study reports:** Assisting in the preparation of self-study report (SSR) that provide a comprehensive overview of the program, including its strengths, weaknesses, and plans for improvement. This involves coordinating with faculty and staff to gather relevant information and evidence.
4. **Coordinating site visits:** Organizing and facilitating site visits by external reviewers to assess the program's compliance with accreditation standards. This includes scheduling visits, coordinating operations, and providing necessary documentation and information to the reviewers.

5. **Managing accreditation process:** Guiding the program during the accreditation process by submitting required documents, responding to requests for additional information, and addressing any recommendations or requirements identified by the NCAAA. Ensuring that all necessary documents, reports, and records related to the accreditation process are properly maintained and accessible. This includes maintaining a record of accreditation status, site visit reports, and any correspondence with the NCAAA.

6. **Continuous improvement:** Collaborating with faculty and program management to develop and implement strategies for continuous improvement. This may involve analyzing assessment data, identifying areas for enhancement, and implementing changes to improve program quality and effectiveness.

7. **Communication and collaboration:** Facilitating communication and collaboration with relevant stakeholders, including faculty, staff, students, and external reviewers. This involves sharing information, providing updates on accreditation processes, and addressing any concerns or questions.

8. **Professional development:** Promoting professional development opportunities for faculty and staff to enhance their understanding of assessment practices, accreditation requirements, and quality assurance processes by organizing meetings or workshops.

9. **Monitoring and evaluation:** Monitoring the program's progress and evaluating the effectiveness of accreditation-related activities. This involves regularly reviewing and updating assessment plans, accreditation documentation, and improvement initiatives to ensure ongoing compliance with NCAAA standards.
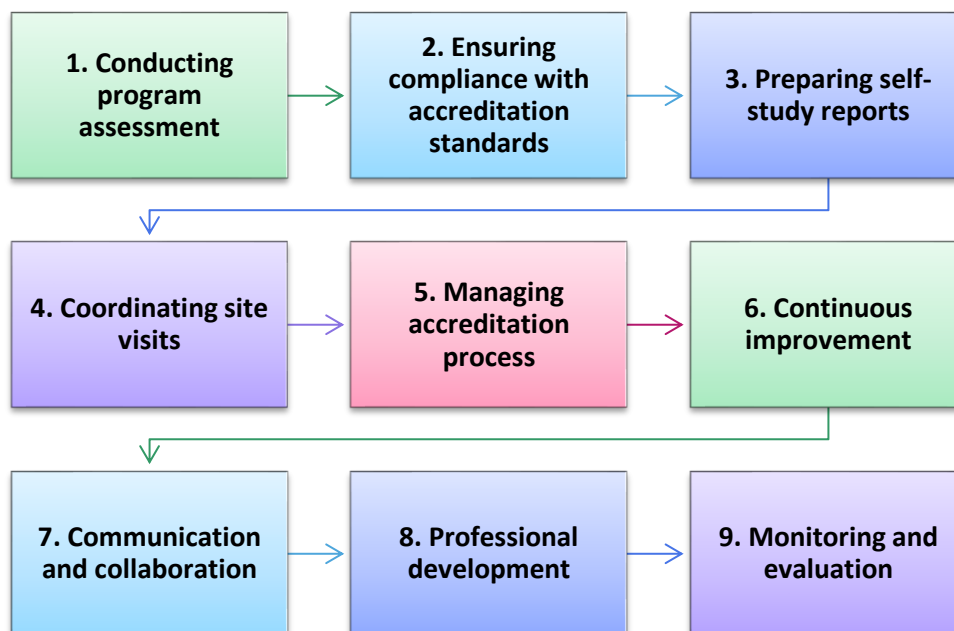
Chart 3. Responsibilities of the Assessment and Accreditation Committee.

2.2. Program Advisory Committee

The Program Advisory Committee plays a crucial role in providing guidance and recommendations to enhance the quality and relevance of academic programs. This includes reviewing program objectives, curriculum design, assessment strategies, and labor market alignment to ensure continuous improvement and meet the needs of the community.

Responsibilities of the Program Advisory Committee:

The committee assesses the analysis data obtained by direct and indirect methods in:

1. Curriculum Review, and Development:

1.1.   Regularly review the curriculum to ensure it aligns with program goals, learning outcomes, and current developments in the field.

1.2.   Identify opportunities for enhancement based on educational, scientific, technical, and professional advancements.

2. Practical, Theoretical, and Applied Course Analysis:

2.1.   Conduct an analysis of all courses to categorize them based on practical, theoretical, and applied components.

2.2.   Provide detailed information about the nature of each course to ensure a balanced curriculum.

3. Revision of CLOs to PLOs Mapping:

3.1.   Develop a comprehensive mapping system between Course Learning Outcomes (CLOs) and Program Learning Outcomes (PLOs).

3.2.   Ensure that each course's outcomes contribute to the achievement of the program's overall objectives.

4. Study Plan Evaluation:

4.1.   Evaluate the study plan to ensure it maintains a balance between general and specialty requirements.

4.2.   Verify that the plan adequately integrates theoretical and applied aspects of the coursework.

4.3.   Consider the sequencing and integration of courses for a cohesive learning experience.

Types of changes to be implemented by the Program Advisory Committee:

- Revision of student learning outcome statement (s) to ensure they align with current society needs and program goals.

- Changes in teaching strategies.

- Changes in assessment methods to better measure student progress and PLOs.

- Revision of prerequisites.

- Revision in course sequences.

- Modifying or updating the content of program courses.

- Addition/deletion of course(s).

- Changes in teaching staff.

- Revision of advising processes.
- Propose changes admission requirements.
- Suggest changes to the resources available to support the program, such as updating or acquiring new equipment, enhancing library resources, or expanding faculty expertise.
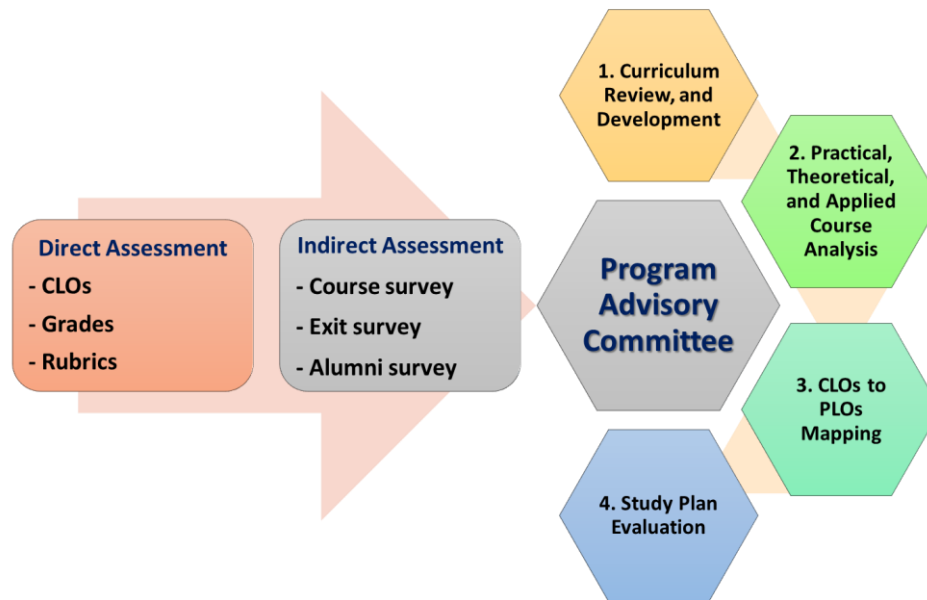

Chart 4. Flowchart of main responsibilities of the Program Advisory Committee.

2.3. Research, Resources, and Community Committee

Generally, the Research, Resources, and Community Committee aims to monitor the program's research output, resource utilization, and community services. It supports research activities within the program, manages and ensures that resources are available for the program's activities, such as equipment, facilities, and technology. It encourages the students' contribution to community by organizing outreach activities.

Responsibilities of the Research, Resources, and Community Committee:

1. **Research responsibilities:**

   - The preparation of an operational plan for academic research and its follow-up.

   - The preparation of a system for monitoring and documenting the research activities of the program.

   - The preparation of periodic performance reports of the research plan.

2. **Academic supervision monitoring:**

   - The preparation of guides, regulations, and procedures for scientific supervision of theses.

   - Follow-up scientific supervision reports in the program.

3. **Announcing scientific events:**

   - Encouraging students to participate in scientific events as valuable opportunities for students to present their research findings, acquire knowledge about scientific advancements, and network with experts in the field. By participating in these events, students can enhance their communication and presentation skills, develop critical thinking abilities, and broaden their knowledge base. Examples of such events include conferences, symposiums, poster presentations, and workshops, where students can engage in intellectual discussions, receive feedback on their work, and stay updated with the latest trends in their respective fields.

4. **Organize events for community service:**

   - Engaging students in community service to promote education and awareness about herbal medicines within the community. By involving students in community service initiatives focused on herbal medicine, they can actively contribute to the well-being of the community while gaining practical experience and knowledge, for e.g., workshops, seminars, or campaigns to educate community members about the benefits and safe usage of herbal medicines.

5. **Effective use of resources, facilities, and equipment:**

   - Evaluating the effectiveness and efficiency of the program's resources, facilities, and equipment of all types; and using the results for improvement.

2.4. Academic Advising and Alumni Committee

The Academic Advising and Alumni Committee is set to provide guidance and support to students throughout their academic journey. This includes assisting with course selection, academic planning, and career development. The committee also fosters connections with alumni and gather feedback from them to improve the program and maintain strong relationships with colleagues in the field. Ultimately, the committee aims to enhance student success, career prospects, and alumni engagement with the program.

Responsibilities of the Academic Advising and Alumni Committee:

1. **Policy development and distribution:**
   - Preparing advising policies and procedures guided by those of the institution and distributing them to students through various channels, such as websites, emails, and workshops.
2. **Orientation programs:**
   - Organizing and facilitating orientation programs for new students to familiarize them with academic policies, resources, and support services available on campus.
3. **Collaborative partnerships:**
   - Collaborating with faculty, staff, and other campus departments to ensure coordinated support for students.
4. **Student guidance and academic planning**
   - Providing guidance and support to students in navigating their academic journey.
   - Assisting students in developing personalized academic plans to ensure they meet their educational goals and requirements.
5. **Data analysis:**
   - Collecting and analyzing data related to student success, retention, and graduation rates to identify trends and areas for improvement in the advising process.
6. **Alumni services:**
   - **Alumni engagement:** Developing strategies to engage alumni and maintain a strong connection between the institution and its graduates.
   - **Reunion events:** Planning and organizing alumni reunion events to bring together alumni from different graduating classes, fostering their connection to the institution.
   - **Alumni database management:** Maintaining an updated database of alumni contact information, employment details, and other relevant data to facilitate communication and engagement efforts.
   - **Alumni recognition:** Recognizing and celebrating the achievements and contributions of alumni through awards and honors.
   - **Alumni career services:** Providing career resources, job postings, and networking opportunities to support alumni in their professional development and job search.
   - **Alumni surveys and feedback:** Conducting surveys and gathering feedback from alumni to assess their satisfaction, gather input on the program and identify areas for improvement.

2.5. Surveys Committee

The Surveys Committee is working under supervision of the Assessment and Accreditation Committee. It is responsible for designing, administering, and analyzing surveys to gather feedback from students, and stakeholders to assess the effectiveness of the program. It collaborates with the Assessment and Accreditation Committee to align survey results with the NCAAA accreditation requirements.

Responsibilities of the Surveys Committee, this includes important surveys conducted by the Surveys Committee as listed below:

1) **Exit Survey (Each Semester):**

- It provides valuable insights into students' overall experiences in the program, allowing for a comprehensive assessment of program learning outcomes. It helps in measuring the strengths and weaknesses of the program, curriculum, teaching methods, and support services. This information helps identify areas where improvements are required to enhance the overall learning experience and ensure that program learning outcomes are met.
- *The planned assessment of PLOs by indirect method (i.e. by surveys) is based on 4 selected courses: PHG 621, PHG 623, PHG 632, and PHG 637.*

2) **CLOs satisfaction survey (on all courses each semester):**

- It is a tool used to assess the satisfaction of students with the achievement of program learning outcomes. It measures the program's ability to deliver the knowledge, skills, and values outlined in the learning outcomes. Survey questions include for e.g., the program's relevance to their career, applicability of the program learning outcomes to real-life situations, adequacy of the program in developing the knowledge and skills outlined in the learning outcomes, and its success in achieving the stated learning objectives.

3) **Students' evaluation of quality of academic supervision (Stage 1: developing proposal, Stage 2: collecting data, Stage 3: writing thesis and Stage 4: submitting thesis):**

- The master student survey for quality of supervision includes several key components that are designed to assess and evaluate the effectiveness of supervision in the program. Six supervision aspects are used in this survey, including project management, intellectual support, relevant research skills, inter-personal communication skills, workload management and supportive skills at different research stages.

4) **Employers' evaluation of the program graduate's competency:**

- It provides a valuable insight into the graduates' performance and the relevance of the skills and knowledge acquired during their studies. By conducting the survey, employers can evaluate the competence of graduates in practical situations, assessing their skills, adaptability, and problem-solving abilities. This evaluation helps identify any gaps in the curriculum and ensures that it is in line with the needs of the labor market. The feedback received from employers is used to make

improvements to the program, providing graduates with the necessary skills for their careers. Additionally, they may provide suggestions, which are considered while preparing improvement plans.

❖ **Important sections require surveys preparations and analysis:**

a) **KPIs elements:**

No.	KPI
KPI-P-01	Students' evaluation of quality of learning experience in the program
KPI-P-02	Students' evaluation of the quality of the courses
KPI-P-03	Students' evaluation of the quality of scientific supervision
KPI-P-06	Employers' evaluation of the program graduate's competency
KPI-P-07	Students' satisfaction with the offered services

b) **Section #5 of the program report: Students Evaluation of Academic Supervision:**

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Evaluation Date:	Number of Participants:
Students Feedback	Program Response
Strengths: ● ●	
Areas of Improvement: ● ●	
Suggestions for improvement: ● ●	

3. Program Information

3.1. Program Learning Outcomes (PLOs)

Knowledge and Understanding:	
K1	Describe the concepts, principles, and methods used in the identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.
K2	Explain the methods and techniques used in the assessment of quality, safety, and efficacy of herbal drugs and phytopharmaceuticals.
K3	Recognize ethical, legal, and regulatory principles of professional practice of phytotherapy.

Skills:	
S1	Apply evidence-based knowledge to ensure scientifically verified efficacy and safety of herbal drugs and phytopharmaceuticals.
S2	Apply scientific research methodologies, employ materials, instruments, and technologies to analyze and interpret data pertaining to phytotherapeutic drugs, and make valuable contributions to the field of natural products knowledge.
S3	Accurately assess and evaluate professional reports and publish research papers in scientific journals and conferences to solve problems on the applications and assessment of phytopharmaceuticals.
S4	Demonstrate effective presentation and communication capability in front of a range of audiences.

Values, Autonomy, and Responsibility:	
V1	Adopt ethical, legal, and professional responsibilities and safety guidelines.
V2	Contribute to improving the quality of life in the community by demonstrating social and cultural values that fulfill community needs and raise awareness about the use of herbal drugs.
V3	Promote leadership and independent initiative in planning, self-learning capability, and effective participation in research with high autonomy and responsibility.

3.2. Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Course	Required	11	20	66.7%
	Elective	2	4	13.3%
Graduation Project (if any)	--	--	--	--
Thesis (if any)	Thesis	1	6	20%
Field Experience (if any)	--	--	--	--
Others (.....)	--	--	--	--
Total		14	30	100%

• Program Courses

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 1	PHG 611	Herbal Drugs Macro- & Microscopical Analysis	Required	-	1+1	Program
	PHG 612	Phytomedicinal Products	Required	-	1+0	Program
	PHG 613	Production, Collection and Isolation of Herbal Medicines	Required	-	2+1	Program
	PHG 614	Phytotherapy I	Required	-	2+0	Program
Level 2	PHG 621	Phytotherapy II	Required	PHG 614	2+0	Program
	PHG 622	Quality Control of Phytopharmaceuticals	Required	PHG 611	1+1	Program
	PHG 623	Principles and Applications of Spectroscopic Techniques	Required	PHG 613	2+1	Program
	PHG 624	Herbal Drugs licensing and Regulations	Required	-	1+0	Program
Level 3	PHG 631	Biological Evaluation of Natural Products	Required	-	1+1	Program
	PHG 632	Seminar in Phytotherapy	Required	-	1+0	Program
	PHG 633	Toxicity and Safety of Herbal Medicine	Required	-	1+0	Program
	PHG XXX	Elective I	Elective	-	2+0	Program
	PHG XXX	Elective II	Elective	-	2+0	Program
Level 4	PHG 699	Thesis	Required		0+6	Program

- **Elective courses for level 3 (Third semester):**

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
Level 3	PHG 634	Microbial Biotransformation & Tissue Culture	Elective	-	2+0	Program
	PHG 635	Aromatherapy	Elective	-	2+0	Program
	PHG 636	Phytocosmeculticals	Elective	-	2+0	Program
	PHG 637	Alternative & Complementary Medicine	Elective	-	2+0	Program
	PHG 638	Herb-Drug Interactions	Elective	-	2+0	Program
	PHG 639	Forensic Pharmacognosy	Elective	-	2+0	Program

3.3. Program Learning Outcomes Mapping Matrix

Course code & No.	Program Learning Outcomes									
	Knowledge and understanding			Skills				Values, Autonomy, and Responsibility		
	K1	K2	K3	S1	S2	S3	S4	V1	V2	V3
PHG 611	I	I		I	I			I		I
PHG 612	I	I			I				I	
PHG 613	I	I		I	I					I
PHG 614	P		P	P					P	P
PHG 621	P_A		P_A	P_A					P_A	P_A
PHG 622	P	P		P	P			P		
PHG 623	P_A	P_A		M_A	M_A					P_A
PHG 624			P	P				P	P	P
PHG 631	P	P		P	P					P
PHG 632					M_A	M_A	M_A	M_A	M_A	M_A
PHG 633	M	M		M				M	M	
PHG 634**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 635**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 636**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 637**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 638**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 639**	M_A	M_A	M_A	M_A				M_A	M_A	
PHG 699	M	M	M			M	M			M

* Subscript "A": Selected for <u>annual</u> assessment. *(I = Introduced, P = Practiced, M = Mastered).*
** Elective course (PHG XXX): one of the elective courses will be selected for <u>annual</u> assessment.

Mapping all course learning outcomes (CLOs) against program's learning outcomes (PLOs)

Mapping Correlation	LOW	MED	HIGH	NO
	1	2	3	

Courses	CLOs	ALL COURSES' LEARNING OUTCOMES (CLOs statements)	PROGRAM LERANING OUTCOMES (PLOs)									
			K1	K2	K3	S1	S2	S3	S4	V1	V2	V3
PHG 611	1.1	Recognize the general terms, history, and pioneers of plant taxonomy and systematics.	2									
	1.2	List various methods of naming plant taxa, such as binomial nomenclature and the International Code of Botanical Nomenclature (ICBN)	1									
	1.3	Identify morphological as well as anatomical features of different plant parts, including leaf, stem, bark, root, flower, and seed.	1									
	2.1	Differentiate between various plant taxa based on their macro- and microscopic characteristics.					1					
	2.2	Use appropriate terminology to describe various macro- and microscopic plant structures and special modifications.					1					
	2.3	Apply proper methods to prepare herbaria and to write useful information on an herbarium note of a plant species.						2				
	3.1	.professional values based on integrity, accountability, and responsibility Combine								1		
	3.2	.collaboratively and constructively alone or in group to perform tasks Work										2
PHG 612	1.1	Recognize the ingredients of the plants, their origin, chemical structure, dosage forms, contraindications, and side effects	3									
	1.2	Describe examples of these ingredients used for treating various diseases	1									
	1.3	Detect the qualitative and quantitative determination of these ingredients, their biological activities and usage area.		2								
	2.1	Explain different ways of detection of ingredients of the plants by their physical and chemical properties and by using various reagents, qualitative and quantitative estimation.						3				
	2.2	Predict the possible risks, side effects and contraindications.					3					
	2.3	Demonstrate the biological activities and usage area of these plants	1									
	3.1	Increase community awareness of the benefits and risks of plants.									3	
	3.2	Promote critical thinking, problem-solving, decision-making, and time management capabilities.										3
PHG 613	1.1	Recognize the principles of collection, preparation of specimens, identification, and extraction of plant materials	2									
	1.2	State different methods of purification of Natural Products	1									
	1.3	Recognize the principals involved in various modes of chromatography.						2				
	1.4	Describe the role of chromatography and separation science in the field of Natural products.	1									
	2.1	Compare the different methods of extraction and their applications.	1									
	2.2	Demonstrate the use and selection of the appropriate types of chromatography in the separation of Natural Products	2									
	2.3	Explain the role of various chromatographic techniques in qualitative and quantitative analysis.		2								
	3.1	Illustrate and interpret technical information using written progress reports, strategic reports, formal scientific written communications, and statistical techniques.							2			
	3.2	Select the proper methods for collection, identification and extraction of plant materials.		1								
	3.3	Operate and set up experiments and analyses using different chromatographic techniques.										2
PHG 614	1.1	Recognize the pharmacological properties of phytotherapeutic drugs, including mechanism of action, uses, dosage, contraindications, adverse drug reactions, and drug interactions.	3									
	1.2	Give an example of natural drugs used for treating various diseases affecting women and infants' health and various body systems, including CNS, urinary system, respiratory system, and digestive system.	2									
	1.3	Detect the therapeutic effects of different classes of bioactive plant secondary metabolites and identify their structure-activity relationship.					3					
	2.1	Apply the phytotherapeutic principles in the proper selection and use of drugs from natural origin in the treatment of various disease conditions.	1									
	2.2	Predict the possible risks, drug-drug interaction, and adverse reactions of herbal drug formulations.		2								
	2.3	Classify phytotherapeutic drugs used in the treatment of diverse diseases affecting various body systems based on their mode of action.					2					
	3.1	Increase community awareness of the benefits and risks of herbal medicine.									3	
	3.2	Promote critical thinking, problem-solving, decision-making, and time management capabilities.										1

Course	Code	Description	1	2	3	4	5	6	7	8	9	10	11
PHG 621	1.1	Discuss the therapeutic effects of common food ingredients and standardized plant extracts as immunostimulant, supportive, and antiobesity therapies.	2										
	1.2	Give examples of natural drugs used for treating various disorders of the cardiovascular system, immune systems, liver and biliary system, and skin.	1										
	1.3	Report the various therapeutic aspects of phytopharmaceuticals, such as the mechanisms of action, dosages, adverse effects, interactions, safety measures, and contraindications		1									
	2.1	Classify and correctly suggest effective phytotherapeutic treatment for various disorders of cardiovascular system, immune systems, liver and biliary system, skin, and obesity.				2							
	2.2	Compare benefits versus risks, herb-drug and herb-herb interactions, and adverse reactions when prescribing herbal drug formulations.		2									
	2.3	Explain the efficacy as well as the mechanism of action of certain medicinal plants/extracts/bioactive component in treating disorders of cardiovascular system, immune systems, liver and biliary system, skin, and obesity.				1							
	3.1	Contribute to the development of the practice, awareness, research-base, and professional standing in herbal medicine in the community.										3	
	3.2	Promote critical thinking, problem-solving, decision-making, and time management capabilities.											2
PHG 622	1.1	Outline the proper storage conditions and identify organoleptic and morphological used in the evaluation of herbal drugs.											
	1.2	Recognize the role of microscopical characters and measurements in herbal drugs quality control.					1						
	1.3	Recognize the various adulteration methods.					1						
	1.4	Describe the different values in herbal drugs evaluation.						2					
	2.1	Demonstrate different methods of extraction and their applications in preparation of samples for analysis.					2						
	2.2	Practice and application of various Chromatographic techniques in qualitative and quantitative analyses.							1				
	2.3	Manipulate information from the herbal monographs containing qualitative and quantitative methods of analysis							1				
	3.1	Illustrate and interpret technical information using written progress reports, strategic reports, formal scientific written communications, and statistical techniques.							3				
	3.2	Select the proper methods for evaluation of herbal drugs.		3									
	3.3	Operate and set up experiments and analyses for herbal drugs quality control.					3						
PHG 623	1.1	Recall the principles and compare the applications of different spectroscopic methods used for structure elucidation, including MS spectrometry, IR, UV-Vis, NMR spectroscopy, X-Ray crystallography, and optical rotation.	2										
	1.2	Explain the working principles and application of IR and UV shift reagents in the determination of the hydroxylation pattern of flavonoids.					1						
	1.3	Identify the common types of fragmentation processes in MS spectrometry.					1						
	1.4	Apply 1D- and 2D-NMR in structure elucidation.					2						
	2.1	Propose and apply different spectral techniques, including MS spectrometry, IR, UV-Vis, NMR spectroscopy, X-Ray crystallography, and optical rotation, in interpreting the structures of organic molecules.	2										
	2.2	Propose and apply different spectral techniques, including MS spectrometry, IR, UV-Vis, NMR spectroscopy, X-Ray crystallography, and optical rotation, in interpreting the structures of organic molecules.	2										
	2.3	Predict the number of signals and splitting patterns in the ^{1}H-NMR of a given organic structure and use this knowledge to interpret the spectra of molecules.					2						
	3.1	Illustrate and interpret technical information using written progress reports, strategic reports, formal scientific written communications.							2				
	3.2	Select the proper methods for identification and structure elucidation of natural compounds.	3										
	3.3	Operate and set up analyses using different spectroscopic techniques.					3						
PHG 624	1.1	Define the historical events that necessitated the evolution of special regulation for herbal drug manipulation and recognize the agencies involved in herbal drug approval.		2									
	1.2	Explain the fundamental principles governing the safety and efficacy of herbal drugs and licensing.		1									
	1.3	Describe the role and functions of the global herbal drug authorities.			1								
	2.1	Analyze and interpret the regulatory requisites encompassing the development, manufacturing, and marketing of herbal drugs.					3						
	2.2	Evaluate and critically assess the available evidence pertaining to the safety and efficacy of herbal drugs and regulations.					2						
	2.3	Demonstrate and evaluate the process of herbal drug registration in the Saudi market.			1								
	3.1	Practice self-learning and self-assessment principles needed for continuous professional development.											2
	3.2	Promote critical thinking, problem-solving, decision-making, and time management capabilities.											1
PHG 631	1.1	Outline the various methods used for biological evaluation and identification of the role HTS in drug discovery.	3										
	1.2	Recognize the ethical requirements and route of administration of herbal drugs to animals		2									
	1.3	Describe the importance and limitation of *ex*-vivo experiments.	1										
	2.1	Prepare and perform some *in vitro* experiments.											

Course	#	Description	1	2	3	4	5	6	7	8	9	10	11
	2.2	Demonstrate different routes of administration to experimental animals.											
	2.3	Develop the ability to perform some in vivo experiments.	1										
	3.1	Demonstrate the skills necessary to plan, conduct and report on a piece of original research.											1
	3.2	Select the proper methods for testing specific activity.			1								
	3.3	Operate and set up experiments and data interpretation for various biological activity.					1						
PHG 632	1.1	Discuss phytotherapy-related topics, such as standardized extracts as well as issues related to the authentication of herbal products, assurance of their quality, safety establishment, efficacy, bioactivity, and toxicology using modern analytical techniques.	3										
	1.2	Locate and utilize primary and secondary sources relevant to seminars on phytotherapy topics.						2					
	1.3	Identify and report solutions to problems or challenges discussed in the seminar.						3					
	2.1	Apply appropriate research methodologies to investigate and support seminar arguments					3						
	2.2	Demonstrate effective oral communication skills in presenting and discussing seminar topics.							3				
	2.3	Analyze and evaluate complex ideas, arguments, and theories proposed and presented in the seminar					1						
	3.1	Work collaboratively, be self-reflective, and take responsibility for their own actions.											2
	3.2	Promote critical thinking, problem-solving, decision-making, and time management capabilities											1
PHG 633	1.1	Identify the modern knowledge in the field of biotechnology, natural toxins and natural drug discover	3										
	1.2	Recognize fundamentals, methodologies and ethics of the scientific research in the field of biotechnology and natural toxins.			1								
	1.3	Identify principles and fundamentals of the professional practice in the field of natural products.					2						
	2.1	Differentiate between internal poisoning and gastrointestinal irritants					3						
	2.2	Recognize the Carcinogenic irritant Eupborbiaceae and Hallucinogens agents.						2					
	2.3	Identify the allergies or allergic reactions to wind-blown spores or pollen. Dermatitis or skin irritation caused by direct or indirect contact with a plant.							3				
	3.1	Combine professional values based on integrity, accountability, and responsibility.											1
	3.2	Work collaboratively and constructively alone or in group to perform tasks.											2
PHG 634	1.1	Identify the modern knowledge in the field of biotechnology, natural toxins and natural drug discover	2										
	1.2	Recognize fundamentals, methodologies and ethics of the scientific research in the field of biotechnology and natural toxins.	1										
	1.3	Identify principles and fundamentals of the professional practice in the field of natural products.			3								
	1.4	Understand the basic knowledge about the application of microbial biotransformation and tissue culture for the production of pharmaceutically active materials.					2						
	2.1	Apply how biotechnology explain PTC technology and the diversity of microbial world in drugs production					1						
	2.2	outline different substances produced by microbial biotransformation and PTC											
	2.3	Report some pharmaceutical products produced by PTC & MT								2			
	3.1	Demonstrate the skills necessary to plan, conduct and report on a piece of original research.											1
	3.2	Work collaboratively and constructively alone or in group to perform tasks.											2
PHG 635	1.1	Define aromatherapy and describe the historical use, and chemical composition of essential oils for healing various ailments	2										
	1.2	Describe clinical applications, precautions, and contraindications of essential oils on different body systems	1										
	1.3	Give examples of techniques used to ensure the quality, purity, and authenticity of essential oils		3									
	2.1	Distinguish the key bioactive components of some of the most common essential oils					1						
	2.2	Choose the methods of essential oil extraction and preparation based on the characteristics of plant material.											
	2.3	Discuss safety issues, quality control, and contraindications in aromatherapy treatments.				2							
	3.1	Adopt safety precautions and ethical, legal, and professional requirements.								3			
	3.2	Apply the gained knowledge and skills independently and with responsibility to serve the community.											2
PHG 636	1.1	Identify the modern knowledge in the field of phytocosmeceuticals	2										
	1.2	Recognize plants used in cosmetics	2										
	1.3	Identify methods of preparation and formulation			1								
	1.4	Understand the different products used in phytocosmeceuticals	1										

Course	Code	Outcome	C1	C2	C3	C4	C5	C6	C7	C8	C9
	2.1	Apply how to provide pharmaceutical services about phytocosmeceuticals					1				
	2.2	outline different plants used in cosmetics			1						
	2.3	Report some pharmaceutical products used in phytocosmetics					2				
	3.1	Demonstrate the skills necessary to plan, conduct and report on a piece of original research.									1
	3.2	Demonstrate social and cultural values to face community needs								3	
PHG 637	1.1	Outline the main practices in complementary and alternative medicine	2								
	1.2	Retrieve complementary and alternative medicine information sources to solve therapeutic problems			1						
	1.3	Explain indications, mechanisms of action and contraindications of the main agents used in complementary and alternative medicine	1								
	1.4	Identify principles and fundamentals of the quality professional practice in the field of natural products.		1							
	2.1	Choose proper handling and application techniques for narcotics, psychoactive substances, and hazardous plants to prevent any harm to the public			2						
	2.2	Apply efficiently complementary medicine a supportive treatment in various disease	1								
	2.3	Utilize critical thinking in the application of ethics to standards of practice in the area of complementary and alternative medicine information, practices, and promotions			2						
	3.1	Demonstrate the skills necessary to plan, conduct and report on a piece of original research.								1	
	3.2	Work collaboratively and constructively alone or in group to perform tasks									1
PHG 638	1.1	Defines the herb-drug interactions. Knows the importance and mechanisms of herb drug interactions		1							
	1.2	Knows how to avoid herb drug interactions and takes accountabilities			1						
	1.3	Describe the effects of herbs such as *Hypericum perforatum, Ginkgo biloba, Panax ginseng*, Echinacae, garlic as well as their interactions with the recommended drugs.	2								
	1.4	Describe how to find scientific papers about the interaction of herbal teas, grape fruit juice, vitamins and minerals with the conventional drugs as well as the herb-drug interactions in oncology and surgery. Has the ability to review these data and present it.					3				
	2.1	Distinguish the evaluation of herb-drug interaction, mechanisms of herb-drug interactions and advers effects of herbal drugs.				2					
	2.2	Choose the methods of mechanisms of drug- drug and herb drug interactions				2					
	2.3	Discuss the problems with herbal drugs, safety issues, quality control, and contraindications in herb drug interactions. treatments.		3							
	3.1	Demonstrate social, cultural values and for avoiding these interactions to fulfill community needs.								2	
	3.2	Implement the ethical, legal, and professional accountabilities and safety guidelines.							3		
PHG 639	1.1	Give a concise Introduction to Forensic science and it is the application in order to answer questions of interest to a legal system		2							
	1.2	Outline the general definition of forensic Pharmacognosy including examples of some plants and their natural products	2								
	1.3	Provide information about toxicity of poisonous plants, their intoxication and management profile		3							
	1.4	Recognize the toxicity of narcotics, psychotropic substances, including their sources, symptoms, and treatment options			1						
	2.1	Examine toxicity profile of narcotics, psychotropic substances, and poisonous plants				2					
	2.2	plants to application techniques for narcotics, psychoactive substances, and hazardous Choose proper handling and prevent any harm to the publi				3					
	2.3	distinguish between the many groups of abused drugs. According to their effects on the central nervous system and drug schedule									
	2.4	Describe the different analytical and evaluation methods used for identification of poisonous plants and their constituents that affect health or intended for criminal uses				1					
	3.1	Adopt ethical, legal, and professional responsibilities and safety guidelines							3		
	3.2	Demonstrate social and cultural values to fulfill community needs								3	
	3.3	Promote critical thinking, problem-solving, and decision-making capabilities									3

3.4. Teaching and Learning Strategies

Variation in teaching and learning strategies is essential to effectively achieve program learning outcomes in all areas. Here are some strategies that is employed:

- **Traditional lectures**: are delivered by experienced instructors, which allow explanation of basic concepts, provide essential knowledge to students, give a comprehensive overview of a subject, and real-life examples, to ensure that students have a proper understanding of the fundamental concepts necessary to achieve program learning outcomes. Instructors also respond to students' questions during lectures, which promotes a deeper understanding of the material.

- **e-Learning:** Students also benefit from the available e-learning resources, such as Blackboard. Blackboard is a widely used e-learning platform that plays a crucial role in facilitating teaching and learning. Instructors can create, organize course materials, upload lecture notes, readings, and other learning materials, making them easily accessible to students. It provides a tool for communication and collaboration among students and instructors. Discussion boards, chat rooms, and messaging features enable students to engage in online discussions, ask questions, and receive feedback from peers and instructors. It offers a range of assessment tools that enable instructors to create and administer quizzes, assignments, and exams online. These assessments can be automatically graded, providing immediate feedback to students.

- **Practical laboratories**: They include individual work, coordinated groups, and demonstration of experiments by the instructor. They provide students with the opportunity to apply theoretical concepts, develop practical skills, critical thinking, problem-solving, and team-working skills. Practical laboratories also allow students to develop practical skills, including conducting experiments, using equipment, and performing procedures, learn and practice safety protocols and ethical considerations, such as safety guidelines, handling materials and equipment responsibly.

- **Active learning:** This strategy is used to engage students with the course material through activities that require their active participation, such as discussions, problem solving, report writing, and case studies. Students can post questions to the course instructor or discuss solutions with other students. Active learning promotes critical thinking, problem-solving skills, and a deeper understanding of the subject matter.

- **Collaborative Learning:** This strategy encourages students to work together in pairs or groups to accomplish learning goals. Collaborative learning promotes effective communication, teamwork, and the sharing of ideas and opinions.

- **Report writing:** By gathering and evaluating information from various sources, analyzing, and presenting the findings in a concise manner, students develop deeper understanding of the topic, improved research and writing skills, strengthens critical thinking, problem-solving, and reading skills.

- **Seminars and oral presentations:** provide an opportunity for students to develop and enhance key skills such as public speaking, critical thinking, research, and effective communication. They promote active learning by encouraging students to analyze and present information in a clear and organized manner. These activities promote confidence, creativity, and the ability to effectively transfer ideas and opinions. Moreover, they promote collaboration as students provide feedback, ask questions, and engage in meaningful discussions. Overall, they enhance students' knowledge, skills, and abilities in an interactive and engaging manner.

- **Thesis preparation and writing:** Thesis preparation is a comprehensive process that allows students to achieve several learning outcomes. Some of the key learning outcomes gained through thesis preparation include developing advanced research skills, designing research methodologies, collecting, and analyzing data, and interpreting results. It also promotes critical thinking, problem-solving abilities, time management, communication skills, and self-directed learning. It provides the student with the moral principles and ethical guidelines governing the conduct of research, such as involving human subjects, animals, or published data to ensure that studies are conducted with integrity, honesty, and transparency.

- **Paper writing and publishing:** Students during paper writing learn how to critically evaluate existing literature, gather relevant data, and analyze findings to support their discussion. It promotes improved academic writing, understanding of the publishing process, increased knowledge in their field of study, and development of critical thinking and problem-solving skills.

3.5. Study Plan (Two Semesters Plan)

- **Level (1)**

No.	Course Code	Course Title	Credit Hours
1	**PHG 611**	Herbal Drugs Macro- & Microscopical Analysis	1+1
2	**PHG 612**	Phytomedicinal Products	1+0
3	**PHG 613**	Production, Collection and Isolation of Herbal Medicines	2+1
4	**PHG 614**	Phytotherapy I	2+0
Total Credit Hours			**8**

- **Level (2)**

No.	Course Code	Course Title	Credit Hours
1	**PHG 621**	Phytotherapy II	2+0
2	**PHG 622**	Quality Control of Phytopharmaceuticals	1+1
3	**PHG 623**	Principles and Applications of Spectroscopic Techniques	2+1
4	**PHG 624**	Herbal Drugs licensing and Regulations	1+0
Total Credit Hours			**8**

- **Level (3)**

No.	Course Code	Course Title	Credit Hours
1	**PHG 621**	Phytotherapy II	1+1
2	**PHG 622**	Quality Control of Phytopharmaceuticals	1+0
3	**PHG 623**	Principles and Applications of Spectroscopic Techniques	1+0
4	**PHG 624**	Herbal Drugs licensing and Regulations	2+0
	PHG 631	Biological Evaluation of Natural Products	2+0
Total Credit Hours			**8**

- **Level (4)**

No.	Course Code	Course Title	Credit Hours
1	**PHG 699**	Thesis	0+6
Total Credit Hours			**6**

4. Program Quality Assurance

4.1. Terms and Definitions

Academic Program

It refers to a structured and organized set of courses, activities, and requirements designed to provide students with a comprehensive education in a specific field of study or discipline. It typically leads to the attainment of a degree and is offered by educational institutions, such as universities and colleges, and are designed to provide students with the knowledge, skills, and competencies necessary for their chosen career or further academic pursuits.

Program Quality Assurance

A systematic process implemented to ensure that a program meets the established standards. It includes monitoring and evaluating various aspects such as curriculum, teaching methods, assessment, student support, and learning outcomes, with the aim of continuous improvement and providing a high-quality educational experience.

Program Accreditation

It is a review process by an accrediting body to determine if an educational program meets or exceeds the nationally defined standards of quality. Once achieved, accreditation is not permanent, however, it is renewed periodically to ensure that the quality of the educational program is maintained.

Academic Qualification

It is the degree or certification awarded to the student upon successful completion of an educational program, such as bachelor, diploma, and master's degrees. It demonstrates that the individual has acquired knowledge, skills, and competencies in a specific field. It serves as evidence of a person's educational achievement and expertise in a particular area. These qualifications are often required or preferred by employers or professional organizations.

Qualification Framework

It is a structured and standardized framework that defines and organizes qualifications based on their level of complexity, learning outcomes, and credit value. It serves as a reference tool for comparing and understanding different qualifications within a country or across countries. A qualification framework typically includes multiple levels, each representing a specific level of knowledge, skills, and competencies. It provides a transparent and consistent framework for recognizing and comparing qualifications, facilitating mobility, and promoting lifelong learning.

Principal Elements in the Qualifications Framework

The principal elements in the framework are:

- **Levels:** Levels are numbered and linked to qualification titles to describe the increasing intellectual demand and complexity of learning expected as students' progress to higher academic awards.
- **Credits:** Points allocated to describe the amount of work or volume of learning expected for an academic award or units or other components of a program.
- **Domains of Learning:** The broad categories of types of learning outcomes that a program is intended to develop.

Documentation

It refers to the process of creating, organizing, and maintaining records and documents that outline the processes, and activities of the program. It involves capturing and recording information about the program goals, requirements, design, development, testing, implementation, and evaluation. It is essential for ensuring transparency, consistency, and accountability in the program's quality processes and activities.

Action Plan

It is a structured document outlining specific steps, timelines, and responsibilities for implementing quality improvement measures. It serves as a roadmap for addressing identified quality issues, setting goals, and monitoring progress to ensure program quality and compliance with standards.

Learning Outcomes (LOs)

They are specific statements prepared using specific action verbs that describe what learners are expected to know, understand, or be able to do after completing a learning experience or program. They serve as a basis for assessing and evaluating learner performance.

Key performance indicators (KPIs)

They are measurable metrics that are used to evaluate the success and effectiveness of the educational program. They are specific, quantifiable indicators that assess various aspects of the program. They are important tools for assessing the quality of the program and monitoring their performance and contribute to continuous development processes and decision-making support.

Study Plan

A study plan for a program is an academic roadmap that outlines the courses offered in each academic year or semester, including any prerequisite courses and the credit hours assigned to each course. It provides a comprehensive overview of the program's curriculum structure and helps students plan their course selection and progression throughout their academic journey.

Program specification

It is a detailed document that provides a comprehensive description of the program. It provides essential information about the program goals, learning outcomes, curriculum structure, teaching and learning strategies, assessment methods, and any other relevant information. It supports the planning, monitoring, and improvement of the program by those responsible for its delivery. It serves as a guide for program development, implementation, and evaluation, in addition to guiding those teaching in the program.

Course

A course within a program comprises scientific content within a specific field, which constitutes a set of knowledge and skills using effective teaching methods and assessed using appropriate evaluation techniques. It helps achieve the goals and learning outcomes of the program, ensuring that students acquire the necessary competencies and understanding related to the program's goals.

Course Specification

It is a detailed document that provides a description about the course of an educational program. It outlines the course objectives, learning outcomes, content, teaching methods, assessment strategies, and any other relevant information. It serves as a guide for instructors in designing and delivering the course, ensuring consistency and clarity in its implementation. It also provides students with essential information about the course, including prerequisites, credit hours, assessment criteria, and expected learning outcomes.

Course Report

It provides a summary and evaluation of a specific course prepared by the course instructors. It includes information about student performance, learning outcomes assessment, content covered, teaching methods employed, and assessment techniques used. It also includes feedback from students and instructors, highlighting strengths and areas for improvement. It serves as a means of documenting the quality of the course, facilitating communication between instructors and program coordinators, and informing future course development and revisions.

Annual Program Report

It is a comprehensive document of a complete academic year. It is prepared by the program coordinator in consultation with faculty teaching in the program. It includes information about student enrolment, the assessment of the program's effectiveness, challenges and difficulties encountered by the program, and the development plan. The report is submitted to the head of department or college and used as the basis for any modifications or changes in the program.

Self-Study Report (SSR)

It is a comprehensive document prepared by an institution to assess and evaluate the quality and effectiveness of a specific program. It includes a detailed analysis of the program goals, curriculum, teaching and learning strategies, student support services, faculty qualifications, resources, assessment methods, ...etc. It includes evidence and data to support claims of compliance with accreditation standards and benchmarks. It serves as a self-assessment tool for the institution and provides a basis for external evaluation by accrediting bodies like the NCAAA.

Mapping Matrix

A mapping matrix, also known as a correlation matrix, is tool used to establish relationships or correlations between different sets of data or elements. It is typically represented as a table format, where rows and columns represent the different elements being mapped, and the intersections between them indicate the level of correlation or relationship. Mapping matrices are commonly used in quality control and data analysis to identify connections, consistency, and gaps between different variables or components, such as program learning outcomes and courses mapping matrix, skills and competencies mapping matrix, exams and learning outcomes mapping, ...etc.

Cohort Analysis

Cohort analysis refers to the process of tracking and analyzing the progress, retention, and completion rates of a specific group of students who enter the program within a particular academic year until they graduate. This analysis helps identify trends, patterns, and factors that influence student outcomes and provides valuable insights for program evaluation and improvement.

Trend Analysis

It is defined as a statistical and analytical technique used to evaluate and identify changes in data over time. It studies the differences, changes, or developments over time, normally several years to determine if there is a consistent upward, downward, or stable trend.

Stakeholders

A stakeholder is a person, group or organization with a vested interest, or stake, in the decision-making and activities or involvement in the program's success, outcomes, and impact. These include students, employers or professional organizations, faculty, patients and the public.

Benchmark

A benchmark of a program refers to a standard or reference point against which the performance, quality, or effectiveness of the program can be measured or compared. It serves as a point of reference to assess how well the program is meeting its goals, objectives, or desired outcomes. Benchmarks is used in comparisons with other similar programs or institutions to gain insights into relative strengths and weaknesses, and to foster a culture of continuous improvement.

4.2. Consistency with the National Qualifications Framework (NQF) – (Level 7 - Master's Degree)

A. Consistency of Qualification Components:

Item	Requirements according to NQF	Program	Level of Compliance (to be completed by NCAAA Consultant)
Minimum credit hours (units) required	A minimum of (30) credit hours (units) for Master's. Completion of a minimum of (24) credit hours (units) of coursework in addition to at least (6) credit hours (units) for thesis for an academic Master's degree.	30 Credit hours including 6 credit hours for thesis	☒ The program meets the minimum of credit hours required.
Program duration (Minimum number of years)	-The study duration to obtain the qualification is at least two academic years.	Two academic years	☒ The program meets the minimum duration required in years.
Minimum Actual (contact) hours	450 contact hours for Master's or equivalent. 360 contact hours for Master's degree or equivalent with a thesis or project.	656 Contact hours = (22 practical laboratories + 19 lectures) x 16 week	☒ The program meets the minimum actual (contact) hours required.
Enrollment conditions (According to NQF)	- Obtaining a Secondary education qualification or equivalent. - Obtain a bachelor's degree or equivalent.	Obtain a bachelor's degree or equivalent	☒ The Program meets the minimum requirements for students' enrolment at level 4 qualification.

B. Consistency of Learning Outcomes

Code	Program Learning Outcomes (PLOs)	NQF Level Descriptors of Learning Outcomes – Level 7
K	**Knowledge and understanding**	
K1	Describe the concepts, principles, and methods used in the identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.	– In depth and specialized body of knowledge and understanding that covers theories, principles and concepts in main areas of a 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 a range of established and specialized techniques of research and/or inquiry in a discipline, profession or field of work.
K2	Explain the methods and techniques used in the assessment of quality, safety, and efficacy of herbal drugs and phytopharmaceuticals.	Critical knowledge and understanding of processes, materials, techniques, practices, conventions and/or terminology relevant to a certain discipline, profession or field of work. –

Code	Program Learning Outcomes (PLOs)	NQF Level Descriptors of Learning Outcomes – Level 7
		– Advanced knowledge and understanding of a range of established and specialized techniques of research and/or inquiry in a discipline, profession or field of work.
K3	Recognize ethical, legal, and regulatory principles of professional practice of phytotherapy.	– Advanced knowledge and understanding of recent development in one or more disciplines or areas of practice or profession.
S	**Skills**	
S1	Apply evidence-based knowledge to ensure scientifically verified efficacy and safety of herbal drugs and phytopharmaceuticals.	– Apply specialized theories, principles, and concepts in advanced contexts, in a discipline, profession or field of work.
S2	Apply scientific research methodologies, employ materials, instruments, and technologies to analyze and interpret data pertaining to phytotherapeutic drugs, and make valuable contributions to the field of natural products knowledge.	– Apply specialized theories, principles, and concepts in advanced contexts, in a discipline, profession or field of work. – Carry out advanced research or professional project using specialized techniques of research and enquiry in a discipline, profession or field of work. – Use processes, techniques, tools, instruments, and/or materials that are advanced and specialized to deal with complex and advanced practical activities. – Carry out complex and advanced practical tasks and procedures in specialized area related to a discipline, professional practice, or field of work.
S3	Accurately assess and evaluate professional reports and publish research papers in scientific journals and conferences to solve problems on the applications and assessment of phytopharmaceuticals.	– Solve problems in complex and advanced contexts, in a discipline, profession or field of work. – Assess, critically review and reflect on the main concepts, principles, and theories; and provide creative solutions, in complex and advanced contexts, to current issues and problems, in a discipline, profession or field of work. – Select, use and adapt advanced digital technology and ICT tools and applications to process and analyse a variety of data and information forms to support and enhance leading research and/or projects, related to a discipline, professional practice.
S4	Demonstrate effective presentation and communication capability in front of a range of audiences.	– 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.
V	**Values, Autonomy and Responsibility**	
V1	Adopt ethical, legal, and professional responsibilities and safety guidelines.	– Represent integrity and professional and academic values when dealing with various issues.
V2	Contribute to improving the quality of life in the community by demonstrating social and cultural values that fulfill community needs and raise awareness about the use of herbal drugs.	– Contribute to the fostering of the quality life for the community.

Code	Program Learning Outcomes (PLOs)	NQF Level Descriptors of Learning Outcomes – Level 7
V3	Promote leadership and independent initiative in planning, self-learning capability, and effective participation in research with high autonomy and responsibility.	– 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. – Collaborate and participate effectively with research or professional projects or groups, take leadership role, and take high responsibility of the work.

C. Mapping of PLOs with NQF- KSA-V2020

NQF Level Descriptors of Learning Outcomes – Level 7		Learning Outcomes	Aligned PLOs Codes
I- Knowledge and Understanding		In depth and specialized body of knowledge and understanding that covers theories, principles and concepts in main areas of a discipline, profession or field of work.	K1
		Critical knowledge and understanding of processes, materials, techniques, practices, conventions and/or terminology relevant to a certain discipline, profession or field of work.	K1, K2
		Advanced knowledge and understanding of recent development in one or more disciplines or areas of practice or profession.	K3
		Advanced knowledge and understanding of a range of established and specialized techniques of research and/or inquiry in a discipline, profession or field of work.	K1, K2
II- Skills	– **Cognitive Skills**	Apply specialized theories, principles, and concepts in advanced contexts, in a discipline, profession or field of work.	S1, S2
		Solve problems in complex and advanced contexts, in a discipline, profession or field of work.	S3
		Assess, critically review and reflect on the main concepts, principles, and theories; and provide creative solutions, in complex and advanced contexts, to current issues and problems, in a discipline, profession or field of work.	S3
		Carry out advanced research or professional project using specialized techniques of research and enquiry in a discipline, profession or field of work.	S2

	– **Practical and Physical Skills**	Use processes, techniques, tools, instruments, and/or materials that are advanced and specialized to deal with complex and advanced practical activities.	S2
		Carry out complex and advanced practical tasks and procedures in specialized area related to a discipline, professional practice, or field of work.	S2
	– **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.	S4
		Use quantitative and/or qualitative methods to process data and information in complex and advanced contexts, related to a discipline, professional practice, or field of work.	S2
		Select, use and adapt advanced digital technology and ICT tools and applications to process and analyse a variety of data and information forms to support and enhance leading research and/or projects, related to a discipline, professional practice.	S3
III- Values, Autonomy, and Responsibility	– **Values and Ethics**	Represent integrity and professional and academic values when dealing with various issues.	V1
	– **Autonomy and Responsibility**	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.	V3
		Manage specialized tasks and activities in a discipline, work or field of practice effectively, with high autonomy.	V3
		Collaborate and participate effectively with research or professional projects or groups, take leadership role, and take high responsibility of the work.	V3
		Contribute to the fostering of the quality life for the community.	V2

4.3. Alignment of Program's Mission and Goals with the institutions (i.e., College of Pharmacy, Prince Sattam bin Abdulaziz University)

Program Mission	College Mission	University Mission
This program aims to prepare distinguished graduates with a high degree of knowledge in the field of phytotherapy and phytopharmaceutical assessment that contribute effectively to academic environment, scientific research, and community needs.	Providing distinguished pharmaceutical education and preparing competitive pharmaceutical competencies through applying the latest academic standards and encouraging scientific research and effective community partnership.	Delivering distinct education, developing ground-breaking research, enhancing partnerships and social responsibility through a stimulating academic environment, great-caliber human resources, cutting-edge technology, effective strategic partnerships and a supportive administrative system.
Program Goals	**College Goals**	**University Goals**
• Preparing remarkable graduates with specialized qualifications and skills in the field of phytotherapeutic drugs to compete in the labor market.	• Developing students acquired pharmaceutical skills to keep up with developments in the labor market. • Creating and developing academic programs in accordance with national and international standards.	• Empowering students to compete in the labor market. • Attracting and developing distinguished human resources. • Continuous improvement of teaching and learning processes.
• Developing research skills of graduates to produce impactful scientific research locally and internationally.	• Enhancing the position of the college and its programs locally and internationally.	• Boosting the University status locally and globally. • Continuous improvement of quality practices and applications.
• Enhancing graduates' capacity to uphold ethical values, demonstrate social responsibility, and foster sustainable educational advancement.	• Enhancing the environment for applied scientific research in the pharmaceutical sciences. • Strengthening the partnership with the private sector in the field of scientific research and training. • Developing programs that support social responsibility.	• Developing graduate studies and academic research programs. • Developing programs to support social responsibility. • Establishing effective strategic partnerships. • Sustainability of the financial resources of the University. • Improving a supportive administrative structure.

4.4. Mapping Graduate Attributes of Program and Institution

NO.	PSAU graduate attributes		Aligned
1.	Breadth of knowledge	Knowledge that pertains to the principles, concepts, and theories in the field of study.	A
2.	Depth of knowledge	Using acquired knowledge in identifying the various aspects of the latest development of facts and theories in the field and their relevance to other fields.	A, E
3.	Critical & Creative Thinking	Ability to objectively assess different issues, based on given information, and to reach unconventional evaluation of them.	F
4.	Research Skills	Ability to identify problems, review previous relevant literature, collect, and analyze data and recommend solutions.	B
5.	Technical Skills	Having the required field-related skills.	D
6.	Communication Skills	Ability to convey information and communicate effectively and appropriately.	G
7.	Self-directed lifelong learning	Commitment to continue learning based on self-assessment of needs.	C
8.	Career Skills	Demonstrating career-related skills such as teamwork, time-management, negotiation, professionalism, collaboration, cooperation, and accountability.	H
9.	Ethical Responsibility	Committing to practice the established common and professional ethical principles.	B
10.	Social Responsibility	Contributing one's knowledge and skills to meet the needs of the society.	E
11.	Confidence & Adaptability	Believing in one's acquired knowledge and skills; and demonstrating ability to adjust to new conditions.	H

4.5. PLOs Mapping Assessment

4.5.1. Alignment of the Institution's Graduate Competencies with PLOs

PSAU Graduate Competencies	K1 Describe the methods used in identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.	K2 Explain the methods and techniques used in the assessment of quality, safety, and efficacy of herbal drugs and phytopharmaceuticals.	K3 Recognize ethical, legal, and regulatory principles of professional practice of phytotherapy.	S1 Apply evidence-based knowledge to ensure scientifically verified efficacy and safety of herbal drugs and phytopharmaceuticals.	S2 Apply scientific research procedures to discover drugs from plant extracts and contribute to the knowledge in the field of natural products.	S3 Write accurately, evaluate professional reports, and publish scientific research papers in scientific journals and conferences.	S4 Demonstrate effective presentation and communication capability in front of a range of audience	V1 Adopt ethical, legal, and professional responsibilities and safety guidelines.	V2 Demonstrate social and cultural values to fulfill community needs.	V3 Promote critical thinking, problem-solving, and decision-making capabilities.
A. In-depth knowledge with a comprehensive understanding of the principles, theories, and practices related to phytotherapeutic drugs.	√	√	√							
B. Demonstrate research skills, including experimental design, literature reviews, analysis, interpretation of results, understanding of the ethical considerations related to phytotherapeutic drugs.				√	√	√		√		
C. Foster a commitment to lifelong learning and professional development by providing graduates with the skills and motivation to stay updated with the latest advancements in the field					√			√		
D. Display experience in applying various analytical and laboratory techniques in the assessment of phytotherapeutic drugs, such as chromatography, spectroscopy, and bioassay methods for evaluating the potency and safety.		√			√					

E. Exhibit a deep understanding of the pharmacological and toxicological properties of phytotherapeutic drugs and evidence-based approaches enabling them to contribute effectively to the improvement of healthcare in the society.	√		√	√				√	√	
F. Develop critical thinking skills and problem-solving skills, allowing them to propose innovative solutions to challenges in the field.					√					√
G. Show communication and presentation skills and capability to convey scientific information in both written and oral formats.						√	√			
H. Work effectively in multidisciplinary teams and show adaptability to new situations by collaborating with other researchers, healthcare professionals, industry stakeholders.							√		√	

4.5.2. Detailed alignment table between program mission, PLOs, and PSAU graduate attributes:

Program Learning Outcomes (PLOs)	Program Mission Alignment	PSAU Graduate Attributes Alignment
K1: Describe the concepts, principles, and methods used in the identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.	Supports the program's goal of equipping students with comprehensive knowledge of phytotherapeutic drugs, which contributes to academic and research environments.	1. Breadth of knowledge, 2. Depth of knowledge, 10. Social Responsibility
K2: Explain the methods and techniques used in the assessment of quality, safety, and efficacy of herbal drugs and phytopharmaceuticals.	Directly aligns with the mission's goal to prepare graduates with the ability to assess and evaluate the safety and efficacy of herbal products.	2. Depth of knowledge, 4. Research Skills
K3: Recognize ethical, legal, and regulatory principles of professional practice of phytotherapy.	Contributes to ensuring that graduates uphold ethical and professional standards in their work, reinforcing the program's mission to meet community needs.	9. Ethical Responsibility, 10. Social Responsibility
S1: Apply evidence-based knowledge to ensure scientifically verified efficacy and safety of herbal drugs and phytopharmaceuticals.	Aligns with the program's mission of contributing to the scientific research community through evidence-based assessment of phytotherapeutic products.	3. Critical and Creative Thinking, 4. Research Skills
S2: Apply scientific research methodologies, employ materials, instruments, and technologies to analyze and interpret data on phytotherapeutic drugs.	Supports the program's mission of preparing graduates to contribute to scientific research and technological advancements in phytopharmaceutical assessment.	4. Research Skills, 5. Technical Skills, 11. Confidence & Adaptability
S3: Accurately assess and evaluate professional reports and publish research papers in scientific journals and conferences.	Contributes to the mission's goal of advancing academic research and improving the professional and research performance of graduates.	6. Communication Skills, 4. Research Skills
S4: Demonstrate effective presentation and communication capability in front of a range of audiences.	Prepares graduates to engage in academic and professional settings by communicating scientific knowledge effectively, furthering the mission's community impact.	6. Communication Skills
V1: Adopt ethical, legal, and professional responsibilities and safety guidelines.	Aligns with the program's emphasis on ethical standards and its mission to prepare graduates for professional responsibility in healthcare and academic environments.	9. Ethical Responsibility
V2: Contribute to improving the quality of life in the community by raising awareness about herbal drugs.	Reinforces the mission's focus on contributing to community needs by equipping graduates with the skills to raise awareness and improve public health.	10. Social Responsibility
V3: Promote leadership, self-learning capability, and effective participation in research with autonomy and responsibility.	Encourages the leadership and independence necessary to fulfill the mission's emphasis on preparing graduates who contribute effectively to research and academic environments.	8. Career Skills, 11. Confidence & Adaptability

4.5.3. Checklist alignment table between program mission, PLOs, and PSAU graduate attributes:

Program Mission / PSAU Graduate \ PLOs	K1	K2	K3	S1	S2	S3	S4	V1	V2	V3
Program Mission										
Comprehensive knowledge of phytotherapeutic drugs	✓	✓								
Ability to assess safety, efficacy, and quality of drugs		✓		✓						
Scientific contribution to academic research				✓	✓					
Community engagement and healthcare improvements			✓						✓	
PSAU Graduate Attributes										
Breadth of knowledge	✓									
Depth of knowledge	✓	✓								
Critical & creative thinking				✓						
Research skills		✓		✓	✓					
Technical skills					✓					
Communication skills						✓	✓			
Self-directed lifelong learning										✓
Ethical responsibility			✓					✓		
Social responsibility			✓						✓	
Confidence & adaptability										✓

4.6. NCAAA Quality Standards of Postgraduate Program (V2023)

Standard 1. Program Management and Quality Assurance

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

Standard 2. Teaching and Learning

Learning outcomes at the program level must be precisely defined, consistent with the requirements of the National Qualifications Framework, and the labor market 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.

Standard 3. Students

The criteria and requirements of 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.

Standard 4. Faculty

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.

Standard 5. Learning Resources, Facilities, and Equipment

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.

Standard 6. Research and Projects

The program is committed to play a prominent role in the implementation of the Institutional Plan for Research, follow, and develop its research activity. The Program must have an academic and logistical environment supportive of research, and develop research skills for its employees, examine their commitment to ethical principles of scientific research. The program must implement mechanisms to evaluate, develop, and improve these activities.

4.7. Key Performance Indicators (KPIs)

A. NCAAA KPIs of Postgraduate Program (V2022)

NCAAA Standards	No.	KPIs Code	KPIs	Description
1) Teaching and Learning	1	KPI-P-01	Students' evaluation of quality of learning experience in the program	Average of overall rating of final year students for the quality of learning experience in the program.
	2	KPI-P-02	Students' evaluation of the quality of the courses	Average students' overall rating of the quality of courses in an annual survey.
	3	KPI-P-03	Students' evaluation of the quality of scientific supervision	Average students' overall rating of the quality of scientific supervision in an annual survey.
	4	KPI-P-04	Average time for students' graduation	Average time (in semesters) spent by students to graduate from the program.
	5	KPI-P-05	Rate of students dropping out of the program	Percentage of students who did not complete the program to the total number of students in the same cohort.
	6	KPI-P-06	Employers' evaluation of the program graduate's competency	Average of the overall rating of employers for the competency of the program graduates in an annual survey.
2) Students	7	KPI-P-07	Students' satisfaction with the offered services	Average of students' satisfaction rate with the various services provided by the program (food, transportation, sports facilities, academic advising, ...) on a five-point scale in an annual survey.
3) Faculty members	8	KPI-P-08	Ratio of students to faculty members	The ratio of the total number of students to the total number of full-time and full-time equivalent faculty members participating in the program.
4) Research and Projects	9	KPI-P-09	Percentage of publications of faculty members	Percentage of faculty members participating in the program with at least one research publication during the year to total faculty members in the program.
	10	KPI-P-10	Rate of published research per faculty member	The average number of refereed and/or published research per faculty member participating in the program during the year. (Total number of refereed and/or published research to the total

NCAAA Standards	No.	KPIs Code	KPIs	Description
				number of faculty members during the year)
	11	KPI-P-11	Citations rate in refereed journals per faculty member	The average number of citations in refereed journals from published research (total number of citations in refereed journals from published research for faculty members to the total published research).
	12	KPI-P-12	Percentage of students' publication	Percentage of students who: a. published their research in refereed journals. b. presented papers at conferences. to the total number of students in the program during the year.
	13	KPI-P-13	Number of patents, innovative products, and awards of excellence	Number of: a. Patents and innovative products b. National and international excellence awards obtained annually by the students and staff of the program.

B. Program KPIs Measurement Plan:*

The period to achieve the target, cohort analysis (2.5 years).

NCAAA Standards	No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
5) Teaching and Learning	1	KPI-P-01	Students' evaluation of quality of learning experience in the program	4	Five-Scale questionnaire	During the last quarter of the academic year
	2	KPI-P-02	Students' evaluation of the quality of the courses	4	Five-Scale questionnaire	During the last quarter of the academic year
	3	KPI-P-03	Students' evaluation of the quality of scientific supervision	4	Five-Scale questionnaire	During the last quarter of the academic year
	4	KPI-P-04	Average time for students' graduation	5 Semesters	Data collection form	End of the program after awarding the degree
	5	KPI-P-05	Rate of students dropping out of the program	≤ 10%	Data collection form	End of the program after awarding the degree
	6	KPI-P-06	Employers' evaluation of the program graduate's competency	4	Five-Scale questionnaire	End of the academic year
6) Students	7	KPI-P-07	Students' satisfaction with the offered services	4	Five-Scale questionnaire	During the last quarter of the academic year
7) Faculty members	8	KPI-P-08	Ratio of students to faculty members	1:1	Data collection form	During the 1st quarter of the academic year
8) Research and Projects	9	KPI-P-09	Percentage of publications of faculty members	80%	Data collection form by recording faculty members who published	End of the academic year
	10	KPI-P-10	Rate of published research per faculty member	8:1	Data collection based on WOS Author ID records	End of the academic year

NCAAA Standards	No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
					of all Ph.D. faculty members	
	11	KPI-P-11	Citations rate in refereed journals per faculty member	5	Web of Science (WOS) citation records for all publications at this year	End of the academic year
	12	KPI-P-12	Percentage of students' publication			
			a. Published their research in refereed journals.	50%	Data collection form	End of 5th semester before awarding the degree
			b. Presented papers at conferences to the total number of students in the program during the year.	10%	Data collection form	End of 5th semester before awarding the degree
	13	KPI-P-13	Number of patents, innovative products, and awards of excellence			
			a. Patents and innovative products	1	Data collection form	End of 5th semester after awarding the degree
			b. National and international excellence awards	1	Data collection form	End of 5th semester after awarding the degree

* including KPIs required by NCAAA

4.8. Program Quality Assurance

4.8.1. Program Quality Assurance System

A quality assurance system has been prepared for the program to ensure that quality standards are met and maintained. This system involves planning, monitoring, evaluating, and improving the program's performance and outcomes.

1) Establishment of the program objectives and mission:

Clear measurable objectives and mission have been established for the program, which are aligned with the College of Pharmacy's and Prince Sattam bin Abdulaziz University's overall goals and mission.

2) Identification of the quality standards of the program:

❖ Four NCAAA Quality Standards were identified as follows:

1) **Standard 1.** Program Management and Quality Assurance
2) **Standard 2.** Teaching and Learning
3) **Standard 3.** Students
4) **Standard 4.** Faculty
5) **Standard 5.** Learning Resources, Facilities, and Equipment
6) **Standard 6.** Research and Projects

3) Identification of key performance indicators (KPIs):

Thirteen key performance indicators (KPIs) established by the NCAAA, which are in line with the issued program accreditation standards V2022, are used to measure the achievement of quality of the program objectives.

4) Identification of benchmarks:

An internal and an external benchmark are selected to compare with the actual performance level of the program. The internal benchmark is mostly the previous academic year of the program. The external benchmark is a similar program selected based on well-defined criteria. These criteria include same specialization i.e., "Pharmacognosy Department", matched timing (i.e., similar labor market requirements), generated by a Saudi University, which follows the same common rules and regulations, and provided almost similar KPIs levels.

5) Identification of methods and procedures:

The method and procedures, including steps, roles, responsibilities, timing, methods to collect, analyze, and report data are identified.

6) Distributing roles and responsibilities:

According to the specific needs and requirements of the program, the faculty members are distributed to several committees for performing specific roles and responsibilities in the quality assurance process. These roles and responsibilities are listed below:

- **Department Council:** They are responsible for reviewing and approving the master's program proposal before it is implemented, approving course specifications, and reports. They are involved in the development and revision of the master's program curriculum. They assess the needs of the program, such as faculty members, facilities, equipment, and funding.

- **Head of the Department:** He handles various administrative tasks related to the master's program and plays a leadership role in ensuring the smooth functioning and continuous improvement of the master's program.

- **Program coordinator:** He plays a crucial role in ensuring the successful operation and continuous improvement of the master's program. He is also responsible for preparing the annual program report.

- **Assessment and Accreditation Committee:** It is responsible for managing the entire quality assurance process, ensuring that all activities are carried out effectively and efficiently.

- **Academic Advisory Committee:** The Academic Advising Committee distributes students to academic advisors from the department's faculty members. The committee assesses the effectiveness of the academic advising process and provides training to ensure that advisors have the necessary knowledge and skills to effectively advise students.

- **Research, Resources, and Community Committee**: It is responsible for preparing and monitoring research plan, monitoring labs, safety, learning resources, research facilities, collecting research records by the program participants (i.e., faculty and students), seeking scientific events, community services, ...etc.

- **Survey Committee:** It is responsible for preparing, monitoring, and analyzing surveys.

- **Beneficiaries/stakeholders involvement (Students, alumni, and employers):** Students, graduates, and employers are asked to respond to a survey regarding the program's effectiveness, outcomes, and experiences. Additionally, they may provide suggestions, which are taken into account while preparing improvement plans.

7) Implementation of the quality assurance plan:

- After identifying the weakness points or improvement areas, action plans are developed, and corrective actions are implemented by the responsible faculty member(s)/committee.

8) Monitoring the program progress:

- The effectiveness of the implemented corrective actions in improving the quality of the program objectives is monitored.

9) Evaluating the program performance:

The overall performance of the program is reevaluated by analyzing data, reporting findings, and recommendations of improvement plans...etc.

❖ Operational plan for implementing the quality assurance system of the program:

17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Activities and Procedures	No.
														■	■	■	An introductory meeting for students in coordination with the Quality Assurance and Accreditation Committee.	1
														■	■	■	Identify course coordinators.	2
													■	■	■		Approving and reviewing course reports.	3
													■	■	■		Approving and reviewing the annual program report in accordance with the mechanism approved by the Deanship of Development and Quality.	4
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Follow up and implement the improvement and development plan for the program according to the program's annual report.	5
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Coordinating and holding advisory committee meetings.	6
											■	■					Submitting the annual performance indicators report to the Deanship of Development and Quality.	7
					■	■	■	■	■	■	■	■					Activating the program plan for colleagues' visits.	8
				■	■	■	■	■	■	■	■	■	■				Activating the program plan in community service.	9
			■	■	■	■	■	■									Application of questionnaires/surveys.	10
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	Periodic self-evaluation of program quality using self-study report (SSR).	11
■	■																Submission of the course reports for the current semester.	12
■	■																Submit the course file for the current semester.	13
■	■																Preparing the program's annual report for the current semester.	14

4.8.2. Program Quality Monitoring Procedures

Program quality monitoring procedures are essential for ensuring that educational programs meet the desired standards and deliver effective learning outcomes. The following procedures are used for monitoring program quality:

- **Regular Curriculum Review:** involves assessing the course content and alignment with the national qualifications' framework in the KSA. Curriculum review also includes evaluating the program's learning outcomes and ensuring they are in line with the program's objectives.

- **Assessment of Learning Outcomes:** This is done by two methods; a direct assessment method, such as exams, presentations, and reports, and indirect methods, which include surveys and questionnaires that provide feedback about the satisfaction of the stakeholders. This allows the detection of areas of strength and weakness within the program and helps identify areas for improvement.

- **Student Feedback and Surveys:** Student feedback and surveys are used for monitoring program quality, helping to identify issues related to curriculum, teaching methods, resources, or support services, helping to guide program improvement.

- **External Peer Review (Optional):** External reviewers assess the program against national standards, providing an objective evaluation of its quality.

- **Accreditation Documents and Procedures:** provide a comprehensive method of monitoring program quality, which demonstrates if the program meets the national standards and ensures continuous monitoring and improvement through periodic reviews.

- **Program Quality Monitoring Procedures:** The suggested program quality monitoring procedures include internal and external audits, evaluation of the internal quality system of the academic program, and the involvement of various committees. The summary of these procedures is as follows:

  - **Internal Program Audit:**

- Establish an internal auditing committee at the department/ or college level with clear standards and tasks.

- Prepare a time plan for the internal review of the program.

- Review the program periodically and prepare a periodic report to address the results of the internal audit visit.

- The Quality Assurance Committee of the department submits recommendations on internal auditing reports to the Department Council for discussion and decision-making.

- The Department Council discusses the internal audit reports of the program to make a relevant decision and suggest an action plan.

- The action plan is approved by the Quality and Development unit, the College Council, and the Deanship of Postgraduate Studies.

- Implement the corrective action by the responsible faculty member/committee after approval.

- Submit the corrective action taken in the light of the external audit report to the Quality Assurance Committee that assesses the effectiveness of corrective action.

  - **External Program Audit (Optional):**

- Establish criteria for selecting and adopting an external auditor for the program.

- Select external references based on the developed criteria and requirements.

- Identify documentation to be reviewed and send it to the Department Council for approval.

- Contact the external auditor to conduct the audit, ensuring objectivity and financial rights preservation.

- The Quality Assurance Committee receives the external auditor's report and sends it to the head of the department.

- The head of the department supervises the Department Council to take the necessary corrective actions based on the external audit reports.

- The action plan is approved by the Quality and Development unit, the College Council, and the Deanship of Postgraduate Studies.

- Implement the corrective action by the responsible faculty member/committee after approval.

- Submit the corrective actions taken in the light of the external audit report to the Quality Assurance Committee that assesses the effectiveness of the corrective action.

  ○ **Evaluation of the Internal Quality System of the Program:**

(a) Establish a committee consisting of faculty members with expertise in quality assurance and program evaluation to evaluate the internal quality system of the program.

(b) Define clear and specific criteria for evaluating the internal quality system.

(c) Prepare an internal quality system evaluation plan, including tools, techniques, and time periods for conducting the evaluation.

(d) The internal quality system evaluation plan is reviewed and approved by the Department Council, the Quality and Development Unit, and the College Council.

(e) The evaluation plan of the internal quality system of the program is implemented and the audit committee generates an evaluation report based on the evaluation results.

(f) The evaluation report is received and discussed by the Quality Assurance Committee and the Department Council, and the Quality and Development Unit,

(g) Based on the evaluation report and discussions, the Department Council and the Quality Assurance Committee develop and implement corrective actions to address the identified weaknesses or areas for improvement.

- Submit the recommendations of the evaluation committee, along with the evaluation reports and details of corrective actions, to the Department council and College Council for approval.

- The Department Council and the Quality Assurance Committee monitor and assess the effectiveness of these actions in improving the internal quality system of the program.

4.8.3. Assessment Plan for Program Learning Outcomes (PLOs)

- At the beginning of each academic year, the program assessment committee (PAC) prepares an assessment plan for PLOs by selecting few mastered courses aligned with each PLO based on the mapping matrix. The assessment plan will be reviewed by the quality unit and will be implemented after approval

from the college council. Direct and indirect methods of measuring of PLOs will be used for effective measurement of PLOs.

- A variety of direct and indirect methods of measuring PLOs will be used. For example, the direct methods include the midterm and final exams, reports, assignments, presentations, and thesis report. Whereas the indirect methods include students' survey and employer's survey.

- The results of each assessment method will be compared with the target values and considered in setting up the action plan for further improvement in achieving PLOs.

- Year-to-year progression of student achievement as measured by different assessment strategies will be taken into consideration and an action plan set up accordingly.

4.8.4. Program Evaluation Matrix:

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Effectiveness of teaching and assessment	Students	- A questionnaire is administered upon completing the course syllabus. - Open discussion for the students during the semester to recognize their weakness points in the course. - Feedback from midterm exam and final exam records.	End of the semester - during the semester
Evaluation of teaching	Peer reviewer (Optional)	The peer reviewer will monitor a teaching session for assessment by filling the peer reviewer assessment form.	During the semester
Extent of students' achievement of course learning outcomes	- Teaching staff - Program coordinator	- Feedback from midterm exam and final exam records. - Annual program report	End of the semester
Improvement of teaching	- Students - Peer reviewer (Optional)	- Learning from students' feedback - Learning from peer reviewer and department feedback Learning/Using various teaching methods (lecturing, discussions, workshops, exams) Learning/Using various teaching medias (projector, whiteboard, videos, educational visits)	End of the semester End of academic year
Quality of learning resources	Students	A questionnaire is administered by end of every semester	End of the semester
Verifying standards of student achievement	- Independent reviewer - Teaching staff	Check student's marks by an independent reviewer/member teaching staff of a sample of student work and remarking of tests or a sample of assignments.	End of the semester
Continuous improvement development process for effectiveness of teaching and assessment	- Graduates - Alumni - Employers	- Surveys - Interviews Visits	End of the semester End of academic year
Learning resources	Administrative staff	Surveys	End of the semester End of academic year

4.9. Learning Outcomes Assessment Plan

Alignment of Program Learning Outcomes with Assessment Methods:

Program Learning Outcomes*		Assessment Methods
Knowledge and Understanding		
K1	Describe the methods used in identification, standardization, biological evaluation, and therapeutic applications of phytomedicinal products.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, and reports. 3. Practical exams. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
K2	Explain the methods and techniques used in the assessment of quality, safety, and efficacy of herbal drugs and phytopharmaceuticals.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, and reports. 3. Practical exams. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
K3	Recognize ethical, legal, and regulatory principles of professional practice of phytotherapy.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, and reports. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
Skills		
S1	Apply evidence-based knowledge to ensure scientifically verified efficacy and safety of herbal drugs and phytopharmaceuticals.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, and reports. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
S2	Apply scientific research procedures to discover drugs from plant extracts and	- Direct methods: 1. Midterm examinations, quizzes, and a final examination.

	contribute to the knowledge in the field of natural products.	2. Homework assignments, interpretation exercises, and reports. 3. Practical exams. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
S3	Write accurately, evaluate professional reports, and publish scientific research papers in scientific journals and conferences.	- Direct methods: 1. Homework assignments and reports. 2. Seminar content preparation 3. Thesis preparation - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
S4	Demonstrate effective presentation and communication capability in front of a range of audience.	- Direct methods: 1. Seminars. 2. Presentations. 3. Thesis discussion. - Indirect Methods: 1. Exit Survey (Each Semester) 3. CLOs satisfaction survey (on all courses each semester)
Values, Autonomy, and Responsibility		
V1	Adopt ethical, legal, and professional responsibilities and safety guidelines.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, and reports. 3. Practical exams. 4. Checking plagiarism software for reports and thesis. - Indirect Methods: 1. Exit Survey (Each Semester) 3. Thesis preparation.
V2	Demonstrate social and cultural values to fulfill community needs.	- Direct methods: 1. Homework assignments, interpretation exercises, and reports. 2. Practical exams. - Indirect Methods: 1. Exit Survey (Each Semester) 3. Thesis preparation.
V3	Promote critical thinking, problem-solving, and decision-making capabilities.	- Direct methods: 1. Midterm examinations, quizzes, and a final examination. 2. Homework assignments, interpretation exercises, case studies, and reports. 3. Practical exams. - Indirect Methods:

		1. Exit Survey (Each Semester)
		2. Thesis preparation.
		3. Students' evaluation of quality of master supervision

A. Assessment Methods for program learning outcomes:

1) **Direct methods:** Direct methods of measuring the achievement of program learning outcomes involve the assessment of specific knowledge, skills, or abilities through direct observation or examination of student performance.

Direct methods used by the program include the following:

- **Exams and Tests:** Written exams are designed to assess students' knowledge and understanding of specific concepts or theories related to the program learning outcomes. They are used to measure the depth of knowledge, critical thinking skills, and problem-solving abilities of students. They include midterm examinations, quizzes, and a final examination, which consist of descriptive questions, case studies, multiple-choice/true-false, matching questions, fill in the blanks, and others.

- **Practical exam:** It is a direct assessment method used to measure the achievement of program learning outcomes. It is designed to allow students to demonstrate their skills and abilities rather than answering theoretical questions. The instructor evaluates their performance based on predefined criteria. It is focused on evaluating students' ability to apply their knowledge and skills in performing specific tasks, demonstrating techniques, or solving problems relevant to the program's learning outcomes.

- **Thesis:** Thesis is a comprehensive assignment that requires students to apply the knowledge and skills they have acquired throughout their program. It involves research, analysis, problem-solving, and presenting results and conclusions with the proper academic writing method.

- **Seminars and presentations:** They are designed to assess specific learning outcomes and directly measure students' knowledge, skills, or abilities. Students are evaluated based on their understanding of the subject matter, their ability to present information clearly, their critical thinking skills, or their ability to engage in scholarly discussions.

- **Homework assignments, interpretation exercises, and reports:** Homework assignments require students to practice and apply their knowledge and skills independently, providing an opportunity for self-directed learning and improving key concepts. Interpretation exercises require students to analyze and interpret data, or case studies, raising critical thinking and problem-solving abilities, which are essential for achieving program learning outcomes. Reports require students to synthesize information, conduct research, and present their findings in a structured and consistent manner. These assessment methods provide a comprehensive view of students' understanding, application, analysis, and communication skills, enabling the instructor to generally assess the achievement of program learning outcomes.

- ❖ **University grading system (academic services portal) used for evaluating the progress of the students of the AAPD program:**

- ▪ The academic grading system provide a record of the student's academic performance, which lists all courses studied in each semester along with their codes, earned credit hours, grades, values, and codes*.

- The record displays the Grade Point Average (GPA) and the Cumulative Grade Point Average (cGPA). The following table includes the grading scheme used to evaluate students in all course categories:

❖ **Regulations or policies for allocation and distribution of grades:**

Code	Score	Points	Meaning
A+	95-100	5	Exceptional
A	90-94	4.75	Excellent
B+	85-89	4.5	Superior
B	80-84	4	Very good
C+	75-79	3.5	Above average
C	70-74	3	Good
F	< 70	0	Failed

2) Indirect Methods:

- **Exit Survey (Each Semester):** It provides valuable insights into students' overall experiences in the program, allowing for a comprehensive assessment of program learning outcomes. It helps in measuring the strengths and weaknesses of the program, curriculum, teaching methods, and support services. This information helps identify areas where improvements are required to enhance the overall learning experience and ensure that program learning outcomes are met.

- **CLOs satisfaction survey (on all courses each semester):** It is a tool used to assess the satisfaction of students with the achievement of program learning outcomes. It measures the program's ability to deliver the knowledge, skills, and values outlined in the learning outcomes. Survey questions include for e.g., the program's relevance to their career, applicability of the program learning outcomes to real-life situations, adequacy of the program in developing the knowledge and skills outlined in the learning outcomes, and its success in achieving the stated learning objectives.

- **Students' evaluation of quality of master supervision: (It includes 4 stages; Stage 1: developing proposal, Stage 2: collecting data, Stage 3: writing thesis, and Stage 4: submitting thesis):** The master student survey for quality of supervision includes several key components that are designed to assess and evaluate the effectiveness of supervision in the program**.** Six supervision aspects are used in this survey, including project management, intellectual support, significant research skills, inter-personal communication skills, workload management and supportive skills at different research stages.

- **Employers survey:** Employers are asked to respond to a survey regarding the program's effectiveness, outcomes, and experiences. Additionally, they may provide suggestions, which are taken into account while preparing improvement plans.

- **The different survey models are listed below:**

4.8.5. Surveys models
4.8.5.1. Exit Survey
This survey is available online *via* the academic services portal of the university.

<div dir="rtl">

الخدمات الإلكترونية الأكاديمية للطلاب

اسم المقرر :	
رمز المقرر:	
الفصل الدراسي:	
العام الجامعي:	

أسئلة خاصة ببداية المقرر

أوافق بشدة (5)	أوافق(4)	اوافق الى حد ما(3)	لا اوافق(2)	لا اوافق مطلقا(1)	أسئلة	م
					كانت الخطوط الأساسية (بما في ذلك المعلومات والمهارات التي صمم المقرر لتطويرها) واضحة بالنسبة لي.	1
					كانت متطلبات النجاح في المقرر (بما في ذلك الواجبات التي يتم التقييم بناء عليها، ومحكات التقييم) واضحة بالنسبة لي.	2
					كانت مصادر مساعدتي في المقرر (بما في ذلك الساعات المكتبية لعضو هيئة التدريس، والمراجع) واضحة بالنسبة لي.	3

أسئلة خاصة بما حدث خلال المقرر

أوافق بشدة(5)	أوافق (4)	اوافق الى حد ما(3)	لا اوافق (2)	لا اوافق مطلقا(1)	أسئلة	م
					كان تنفيذ المقرر والأشياء التي طلب مني أداؤها متسقة مع الخطوط الأساسية للمقرر.	4
					كان عضو هيئة التدريس ملتزماً بإعطاء المقرر بشكل كامل (مثل: بدأ المحاضرات في الوقت المحدد، تواجد عضو هيئة التدريس بشكل دائم، الإعداد الجيد للمواد المساعدة في التدريس، وهكذا).	5
					لدى عضو هيئة التدريس الذي يقوم بتقديم هذا المقرر إلمام كامل بمحتوى المقرر.	6
					كان عضو هيئة التدريس موجوداً للمساعدة خلال الساعات المكتبية.	7
					كان عضو هيئة التدريس متحمساً لما يقوم بتدريسه.	8
					كان عضو هيئة التدريس مهتماً بمدى تقدمي وكان معيناً لي.	9
					كان كل ما يقدم في المقرر حديثا ومفيداً، (النصوص المقروءة، التلخيصات، المراجع، وما شابهها).	10
					كانت المصادر التي احتجتها في هذا المقرر متوافرة كلما كنت أحتاج إليها.	11
					كان هناك استخدام فعال للتقنية لدعم تعليمي في هذا المقرر.	12
					وجدت تشجيعاً لإلقاء الأسئلة وتطوير أفكاري الخاصة في هذا المقرر.	13
					شجعت في هذا المقرر على تقديم أفضل ما عندي.	14
					ساعدت الأشياء التي طلبت مني في هذا المقرر (النشطة الصفية، المعامل، وهكذا) في تطوير معرفتي ومهاراتي التي يهدف المقرر لتعليمها.	15
					كانت كمية العمل في هذا المقرر متناسبة مع عدد الساعات المعتمدة المخصصة للمقرر.	16
					قدمت لي درجات الواجبات والاختبارات في هذا المقرر خلال وقت معقول.	17
					كان تصحيح واجباتي واختباراتي عادلاً ومناسباً.	18
					وضحت لي الصلة بين هذا المقرر والمقررات الأخرى بالبرنامج (القسم).	19

تقويم المقرر

أوافق بشدة (5)	أوافق (4)	اوافق الى حد ما (3)	لا اوافق (2)	لا اوافق مطلقا (1)	أسئلة	م
					ما تعلمته في هذا المقرر مهم وسيفيدني مستقبلاً.	20
					ساعدني هذا المقرر على تحسين قدرتي على التفكير وحل المشكلات بدلاً من حفظ المعلومات فقط.	21
					ساعدني هذا المقرر على تحسين مهاراتي في العمل على شكل فريق.	22
					ساعدني هذا المقرر على تحسين قدرتي على الاتصال بفاعلية.	23

التقويم العام

أوافق بشدة(5)	أوافق(4)	اوافق الى حد ما (3)	لا اوافق(2)	لا اوافق مطلقا (1)	أسئلة	م
					أشعر بالرضا بشكل عام عن مستوى جودة هذا المقرر.	24

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4.8.5.2. Student Experience Survey

Survey model

Student experience survey

Program Title _____

Semester _____ Year _____

Please respond to the following questions by filling in a response for each of your answers.

يرجى الرد على الأسئلة التالية عن طريق ملء إجابة لكل من إجاباتك

- Strongly agree means the statement is true all or almost all of the time and/or very well done.
- Agree means the statement is true most of the time and/or fairly well done.
- Neutral means something is done about half the time.
- Disagree means something is done poorly or not often done.
- Strongly disagree means something is done very badly or never or very rarely done.

1-**أوافق بشدة** يعني أن العبارة صحيحة طوال الوقت أو تقريبًا في كل الأوقات و/أو أنها جيدة جدًا.

2-**أوافق"** يعني أن العبارة صحيحة في معظم الأحيان و/أو جيدة إلى حد ما

3-**محايد** يعني "صحيح" في بعض الأحيان أن شيئًا ما قد تم إنجازه في نصف الوقت تقريبًا.

4-**عدم الموافقة** يعني أن شيئًا ما قد تم تنفيذه بشكل سيئ أو لم يتم تنفيذه كثيرًا.

5- **"لا أوافق بشدة"** تعني أن شيئًا ما قد تم تنفيذه بشكل سيئ للغاية أو لم يتم تنفيذه مطلقًا أو نادرًا ما يتم تنفيذه.

المشورة والدعم Advice and Support

1. It was easy to find information about the institution and its programs before I enrolled at this institution for the first time.   ◯ ◯ ◯ ◯ ◯

1- كان من السهل العثور على معلومات حول المؤسسة وبرامجها قبل أن أسجل في هذه المؤسسة لأول مرة

2. When I first started at this institution the orientation program for new students was helpful for me.   ◯ ◯ ◯ ◯ ◯

2 - عندما بدأت الدراسة في هذه المؤسسة لأول مرة، كان برنامج التوجيه للطلاب الجدد مفيدًا بالنسبة لي

3. There is sufficient opportunity at this institution to obtain advice on my studies and my future career   ◯ ◯ ◯ ◯ ◯

3- هناك فرصة كافية في هذه المؤسسة للحصول على المشورة بشأن دراستي ومسيرتي المهنية المستقبلية

4. Procedures for enrolling in courses are simple and efficient.   ◯ ◯ ◯ ◯ ◯

4-إجراءات التسجيل في الدورات بسيطة وفعالة

مصادر ومرافق التعلم Learning Resources and Facilities   ◯ ◯ ◯ ◯ ◯

5. Classrooms (including lecture rooms, laboratories etc.) are attractive and comfortable.   ◯ ◯ ◯ ◯ ◯

5- تتميز الفصول الدراسية (بما في ذلك قاعات المحاضرات والمختبرات وغيرها) بأنها جذابة ومريحة.

6. Student computing facilities are sufficient for my needs.   ◯ ◯ ◯ ◯ ◯

6-مرافق الحوسبة للطلاب كافية لاحتياجاتي

7. The library staff are helpful to me when I need assistance   ◯ ◯ ◯ ◯ ◯

7-يساعدني موظفو المكتبة عندما أحتاج إلى المساعدة

8. I am satisfied with the quality and extent of materials available for me in the library.   ◯ ◯ ◯ ◯ ◯

8-أنا راضٍ عن جودة وكمية المواد المتوفرة لي في المكتبة

9. The library is open at convenient times.   ◯ ◯ ◯ ◯ ◯

9-المكتبة مفتوحة في أوقات مناسبة

10. Adequate facilities are available for extracurricular activities (including sporting and recreational activities)   ◯ ◯ ◯ ◯ ◯

10-تتوفر مرافق كافية للأنشطة اللامنهجية (بما في ذلك الأنشطة الرياضية والترفيهية) .

11. Adequate facilities are available at this institution for religious observances.   ◯ ◯ ◯ ◯ ◯

11-تتوفر في هذه المؤسسة مرافق كافية لممارسة الشعائر الدينية

Learning and Teaching التعلم والتدريس   ◯ ◯ ◯ ◯ ◯

12. Most of the faculty with whom I work at this institution are genuinely interested in my progress.   ◯ ◯ ◯ ◯ ◯

12..معظم أعضاء هيئة التدريس الذين أعمل معهم في هذه المؤسسة مهتمون حقًا بتقدمي

13. Faculty at this institution are fair in their treatment of students   ◯ ◯ ◯ ◯ ◯

13.أعضاء هيئة التدريس في هذه المؤسسة عادلون في معاملتهم للطلاب

14. My courses and assignments encourage me to investigate new ideas and express my own opinions.   ◯ ◯ ◯ ◯ ◯

14- تشجعني الدورات والواجبات التي أقوم بها على استكشاف الأفكار الجديدة والتعبير عن آرائي الخاصة.

15. As a result of my studies my ability to investigate and solve new and unusual problems is increasing   ◯ ◯ ◯ ◯ ◯

15.نتيجة لدراستي، تتزايد قدرتي على التحقيق وحل المشكلات الجديدة وغير العادية

16. My ability to effectively communicate the results of investigations I undertake is improving as a result of my studies.   ◯ ◯ ◯ ◯ ◯

16..إن قدرتي على توصيل نتائج التحقيقات التي أجريها بشكل فعال تتحسن نتيجة لدراستي

17. My program of studies is stimulating my interest in further learning.   ◯ ◯ ◯ ◯ ◯

17.برنامج دراستي يحفز اهتمامي بمواصلة التعلم

18. The knowledge and skills I am learning will be valuable for my future career.   ◯ ◯ ◯ ◯ ◯

المعرفة والمهارات التي أتعلمها ستكون ذات قيمة لمسيرتي المهنية في المستقبل..18

19. I am learning to work effectively in group activities.
⬡ ⬡ ⬡ ⬡ ⬡
أتعلم العمل بفعالية في الأنشطة الجماعية..19

Overall Evaluation التقييم الشامل
⬡ ⬡ ⬡ ⬡ ⬡

20. Overall, I was satisfied with the quality of my learning experiences at this institution
⬡ ⬡ ⬡ ⬡ ⬡
بشكل عام، كنت راضيًا عن جودة خبراتي التعليمية في هذه المؤسسة..20

4.8.5.3. Students' evaluation of quality of academic supervision

This survey includes several key components that are designed to assess and evaluate the effectiveness of supervision in a master's degree program. The designed elements include:

1. Supervisor Support and Availability: This component assesses the degree to which students feel supported by their supervisors and the accessibility of supervisors for guidance and feedback. Questions focus on the supervisor's responsiveness to inquiries and their willingness to provides assistance when needed.

2. Clarity of Expectations: This component evaluates the clarity of expectations provided by the supervisor regarding the student's research or academic objectives. It includes questions about the communication of project goals, timelines, and performance standards.

3. Feedback and Communication: This component measures the quality and frequency of communication between the student and supervisor, as well as the effectiveness of feedback provided by the supervisor. Questions inquire about the timeliness and usefulness of feedback, as well as the overall communication dynamics between the student and supervisor.

4. Professional Development Opportunities: This component explores the extent to which supervisors support and facilitate the student's professional growth and development. It includes questions about the availability of training, networking opportunities, and resources for skill-building.

5. Research and Academic Support: This component assesses the extent to which supervisors provide guidance and resources to support the student's research or academic pursuits. It covers topics such as access to relevant literature, research methodologies, and academic writing support.

6. Conflict Resolution and Support: This component addresses the availability and effectiveness of mechanisms for resolving conflicts or challenges between the student and supervisor. Questions focus on the presence of support structures for addressing issues that may arise during the supervisory relationship.

7. Overall Satisfaction and Impact: This component gauges the student's overall satisfaction with the supervision experience and the perceived impact of the supervisor's guidance on their academic and professional development. It includes questions that allow students to express their perspectives on the value of their supervisory relationship.

8. Open-Ended Response Opportunities: The survey also includes open-ended questions or sections that allow students to provide qualitative feedback, elaborate on their experiences, and offer suggestions for improvement.

By utilizing these components, the Master Student Survey for quality of supervision aims to capture a comprehensive view of the student's experience with their supervisors, providing valuable insights for program evaluation and potential areas for enhancement.

Survey model

Students' evaluation of quality of academic supervision

Program Title _____

Semester _____Year _____

Please respond to the following questions by filling in a response for each of your answers.

يرجى الرد على الأسئلة التالية عن طريق ملء إجابة لكل من إجاباتك

- **Strongly agree** means the statement is true all or almost all of the time and/or very well done.
- **Agree** means the statement is true most of the time and/or fairly well done.
- **Neutral** sometimes means something is done about half the time.
- **Disagree** means something is done poorly or not often done.
- **Strongly** disagree means something is done very badly or never or very rarely done.

- . **أوافق بشدة** يعني أن العبارة صحيحة طوال الوقت أو تقريبًا في كل الأوقات و/أو أنها جيدة جدًا.
- • **"أوافق"** يعني أن العبارة صحيحة في معظم الأحيان و/أو جيدة إلى حد ما.
- • **محايد** يعني "صحيح" في بعض الأحيان أن شيئًا ما قد تم إنجازه في نصف الوقت تقريبًا.
- • **عدم الموافقة** يعني أن شيئًا ما قد تم تنفيذه بشكل سيئ أو لم يتم تنفيذه كثيرًا.
- • **"لا أوافق بشدة"** أن شيئًا ما قد تم تنفيذه بشكل سيئ للغاية أو لم يتم تنفيذه مطلقًا أو نادرًا ما يتم تنفيذه

21. Supervision was available when I needed it.   ○ ○ ○ ○ ○

1-كان الإشراف متاحًا عندما كنت بحاجة إليه

22. My supervisor/s made a real effort to understand difficulties I faced.   ○ ○ ○ ○ ○

2-بذل المشرف/المشرفون عليّ جهدًا حقيقيًا لفهم الصعوبات التي واجهتها

23. My supervisor/s provided additional information relevant to my topic.   ○ ○ ○ ○ ○

3-قدم المشرف/المشرفون لي معلومات إضافية ذات صلة بموضوعي .

24. I was given good guidance in topic selection and refinement.   ○ ○ ○ ○ ○

4.لقد تلقيت إرشادات جيدة في اختيار الموضوع وتحسينه

25. My supervisor/s provided helpful feedback on my progress.   ○ ○ ○ ○ ○

5.قدم المشرف/المشرفون عليّ تعليقات مفيدة حول التقدم الذي أحرزته

26. I received good guidance in my preparation of proposal.   ○ ○ ○ ○ ○

6.تلقيت توجيهات جيدة في إعداد مقترح البحث .

27. I received good guidance in my literature search and practical works.   ○ ○ ○ ○ ○

7.تلقيت توجيهات جيدة في بحثي الأدبي وأعمالي العملية

28. During my study, my research further developed my problem-solving skills.

خلال دراستي، افادني بحثي إلى تطوير مهاراتي في حل المشكلات.8

29. During my research, I learned to develop my ideas and present them in my written work.

تعلمت خلال بحثي كيفية تطوير أفكاري وتقديمها في عملي الكتابي.9 .

30. My research sharpened my analytical skills.

شحذ بحثي مهاراتي التحليلية.10

31. My own research helped me to develop my ability to plan my own work.

لقد ساعدني بحثي الخاص على تطوير قدرتي على التخطيط لعملي الخاص.11

32. As a result of my research, I feel confident about tackling unfamiliar problems.

نتيجة لبحثي، أشعر بالثقة في معالجة المشكلات غير المألوفة.12

33. During my study, there is opportunities for social interaction with my teachers and other postgraduate students.

خلال دراستي، تتاح لي فرص للتفاعل الاجتماعي مع أساتذتي وطلاب الدراسات العليا الآخرين.13

34. I had good access to the technical support I needed.

كان لدي وصول جيد إلى الدعم الفني الذي أحتاجه.14

35. The thesis examination process was fair.

كانت مناقشة الأطروحة عادلة.15

36. I was satisfied with the thesis examination process.

كنت راضيًا عن عملية فحص ومناقشة الأطروحة.16 .

37. The examination of my thesis was completed in a reasonable time.

كانت فترة اجراءات امتحان الرسالة في وقت مناسب.17

38. Overall, I was satisfied with the quality of my learning experiences and supervision at this institution.

بشكل عام كنت راضيا عن الخبرة التعليمية والاشرافية في هذه المؤسسة.18

39. Suggestions and Recommendations: Do you have any suggestions to improve the academic supervision, or did you encounter any related difficulties?

الاقتراحات والتوصيات: هل لديك أي اقتراحات لتحسين الإشراف الأكاديمي.19

- No لا
- Yes, نعم
- If yes: Write your recommendations:
- إذا كانت الإجابة بنعم: اكتب توصيات ....

4.8.5.4. Employers' evaluation of the graduate's competencies

Survey model

Program Title _____

Semester _____ Year _____

Please respond to the following questions by filling in a response for each of your answers.

يرجى الرد على الأسئلة التالية عن طريق ملء إجابة لكل من إجاباتك.

- **Strongly agree** means the statement is true all or almost all of the time and/or very well done.

- **Agree** means the statement is true most of the time and/or fairly well done.

- **Neutral** sometimes means something is done about half the time.

- **Disagree** means something is done poorly or not often done.

- **Strongly** disagree means something is done very badly or never or very rarely done.

- **أوافق بشدة** يعني أن العبارة صحيحة طوال الوقت أو تقريبًا في كل الأوقات و/أو أنها جيدة جدًا.

- **"أوافق"** يعني أن العبارة صحيحة في معظم الأحيان و/أو جيدة إلى حد ما.

- **محايد** يعني "صحيح" في بعض الأحيان أن شيئًا ما قد تم إنجازه في نصف الوقت تقريبًا.

- **عدم الموافقة** يعني أن شيئًا ما قد تم تنفيذه بشكل سيئ أو لم يتم تنفيذه كثيرًا.

- **"لا أوافق بشدة"** أن شيئًا ما قد تم تنفيذه بشكل سيئ للغاية أو لم يتم تنفيذه مطلقًا أو نادرًا ما يتم تنفيذه

1. In-depth Knowledge المعرفة المتعمقة

1. On a scale of 1 to 5, how would you rate the graduates' in-depth knowledge of principles, theories, and practices related to their field? ○ ○ ○ ○ ○

a) على مقياس من 1 إلى 5، كيف تقيم معرفة الخريجين المتعمقة بالمبادئ والنظريات والممارسات المتعلقة بمجال تخصصهم؟

2. Research Skills مهارات البحث

2. How would you assess graduates' research skills, including experimental design, literature reviews, and ethical considerations related to your field? ○ ○ ○ ○ ○

b) كيف يمكنك تقييم المهارات البحثية للخريجين، بما في ذلك التصميم التجريبي، ومراجعة الأدبيات، والاعتبارات الأخلاقية المتعلقة بمجالك؟

3. Lifelong Learning and Professional Development

3. To what extent do you believe the program has instilled a commitment to lifelong learning and professional development in the graduates? ○ ○ ○ ○ ○

c) لى أي مدى تعتقد أن البرنامج قد غرس الالتزام بالتعلم مدى الحياة والتطوير المهني لدى الخريجين؟

4. Analytical and Laboratory Techniques التقنيات التحليلية والمخبرية

4. How well do graduates apply analytical and laboratory techniques, such as chromatography, spectroscopy, and bioassay methods, in assessing drugs? ○ ○ ○ ○ ○

d) ما مدى نجاح الخريجين في تطبيق التقنيات التحليلية والمخبرية، مثل التحليل اللوني، والتحليل الطيفي، وطرق الفحص الحيوي، في تقييم الأدوية؟

5. Pharmacological and Toxicological Understanding الفهم الدوائي والسمي

5. In your opinion, how deep is the graduates' understanding of the evidence-based approaches which contribute to healthcare improvement? ○ ○ ○ ○ ○

e) في رأيك، ما مدى عمق فهم الخريجين للمناهج القائمة على الأدلة والتي تساهم في تحسين الرعاية الصحية؟

6. Critical Thinking and Problem-Solving Skills التفكير النقدي ومهارات حل المشكلات

6. To what extent have you observed graduates utilizing critical thinking and problem-solving skills in proposing innovative solutions to challenges in the field?   ○ ○ ○ ○ ○

(f إلى أي مدى لاحظت أن الخريجين يستخدمون مهارات التفكير النقدي وحل المشكلات في اقتراح حلول مبتكرة للتحديات في هذا المجال؟

7. Communication and Presentation Skills مهارات الاتصال والعرض

7. How would you rate graduates' communication and presentation skills in conveying scientific information, both in written and oral formats?   ○ ○ ○ ○ ○

(g كيف تقيم مهارات الاتصال والعرض لدى الخريجين في نقل المعلومات العلمية، سواء في شكل كتابي أو شفهي؟

8. Multidisciplinary Collaboration التعاون متعدد التخصصات

8. In your experience, how effectively do graduates work in multidisciplinary teams and demonstrate adaptability to new situations?   ○ ○ ○ ○ ○

(h من خلال خبرتك، ما مدى فعالية عمل الخريجين في فرق متعددة التخصصات وإظهار القدرة على التكيف مع المواقف الجديدة؟

9. Overall Satisfaction الرضا العام

9. On a scale of 1 to 5, how satisfied are you with the graduates from the Master of Program?   ○ ○ ○ ○ ○

(i على مقياس من 1 إلى 5، ما مدى رضاك عن خريجي برنامج الماجستير؟

10. What specific qualities or areas of improvement do you think could enhance the graduates' performance in your organization?

(j ما هي الصفات أو مجالات التحسين المحددة التي تعتقد أنها يمكن أن تعزز أداء الخريجين في مؤسستك؟

....

10. Recommendations: التوصيات:

11. Do you have any recommendations for further enhancing the program to better prepare graduates for the demands of the pharmaceutical industry?   ○ ○

(l هل لديك أي توصيات لمواصلة تعزيز البرنامج لإعداد الخريجين بشكل أفضل لمتطلبات صناعة الأدوية؟

- No لا
- Yes نعم
- If yes: Write your recommendations:(اكتب تعليقاتك

....

4.8.5.5. Blackboard Satisfaction Survey

Instructions: Please indicate your level of satisfaction with the following statements regarding the Blackboard platform by selecting one of the five options:

1 - Very Dissatisfied
2 - Dissatisfied
3 - Neutral
4 - Satisfied
5 - Very Satisfied

For Faculty

1. **Ease of Use**
   The Blackboard platform is easy to navigate and use effectively.

2. **Course Management**
   Blackboard provides adequate tools for managing course materials and assignments.

3. **Communication Tools**
   The communication features (e.g., announcements, discussion boards) are effective for interacting with students.

4. **Technical Support**
   I am satisfied with the technical support available for using Blackboard.

5. **Overall Experience**
   My overall experience with Blackboard as an e-learning tool meets my expectations.

For Students

1. **Ease of Use**
   The Blackboard platform is easy to navigate and use effectively.

2. **Access to Resources**
   I can easily access course materials, assignments, and resources on Blackboard.

3. **Communication Tools**
   The communication features (e.g., messages, discussion boards) help me connect with my instructors and classmates.

4. **Technical Support**
   I am satisfied with the technical support available for using Blackboard.

5. **Overall Experience**
   My overall experience with Blackboard as an e-learning tool meets my expectations.

Additional Comments

Please provide any additional comments or suggestions for improving the Blackboard platform:

4.8.5.6. Training Needs Assessment Survey (Example)

Introduction:

We are conducting a survey to identify the training needs of our faculty members. Your feedback is essential for developing effective academic and professional development programs. Please take a few minutes to complete this survey.

Section 1: Faculty member information

1. **Name (optional):**

2. **Academic rank:**

   o   Professor

   o   Associate professor

   o   Assistant professor

   o   Teaching assistant

3. **Years of Experience in current position:**

   o   Less than 1 year

   o   1-3 years

   o   4-6 years

   o   7+ years

Section 2: Current Skill Assessment

5. **Rate your confidence in the following areas (1 = Not confident, 5 = Very confident):**

Area	1	2	3	4	5
Teaching Strategies; e.g. the use of technology in teaching and assessment (e-learning system, including Blackboard, ..etc.)					
Research Methodologies; such as Endnote, WOS, Google applications in research?					
Advancements in Current Natural Drug Analysis?					
Choosing the Right Journals for Publication?					
Application of molecular docking techniques in drug discovery?					
Understanding Plagiarism: Effective Use of the iThenticate Tool for Academic Integrity?					

Section 3: Training Needs Identification

6. **Which areas/topics do you feel need improvement? (Select all that apply)**

   o   Teaching Strategies; e.g. the use of technology in teaching and assessment (e-learning system, including Blackboard, ..etc.)

- Research Methodologies, such as Endnote, WOS, Google applications in research?

- Advancements in Current Natural Drug Analysis?

- Choosing the Right Journals for Publication?

- Application of molecular docking techniques in drug discovery?

- Understanding Plagiarism: Effective Use of the iThenticate Tool for Academic Integrity?

- Other: _____

7. **Preferred Format for Training (Select all that apply):**

- In-person workshops

- Online courses

- Other: _____

Section 4: Additional Feedback

9. **How often would you like training sessions to be offered?**

- Monthly

- Quarterly

- Annually

10. **Please provide any additional comments or suggestions regarding training needs:**

Thank you for your participation! Your feedback is invaluable in shaping our professional development programs.

4.8.5.7. Workshop Feedback Survey (2022-2023)

Introduction:

Thank you for attending the workshop. We value your input, and your feedback will help us improve future workshops. Please take a few minutes to complete this survey.

Section 1: Workshop information

4. **Workshop title:**

5. **Workshop date:**

Section 2: Faculty member information

1. **Name (English):**

2. **Academic rank:**

   o   Professor

   o   Associate Professor

   o   Assistant Professor

   o   Teaching Assistant

6. **Years of Experience in current position:**

   o   Less than 1 year

   o   1-3 years

   o   4-6 years

   o   7+ years

Section 3. Workshop Content (Rate your satisfaction)

- How satisfied were you with the content of the workshop in terms of relevance, coverage, and depth?

☐ Very Satisfied

☐ Satisfied

☐ Neutral

☐ Dissatisfied

4. Workshop Delivery

- How would you rate the overall delivery of the workshop, including the speaker's presentation skills, ability to engage participants, and clarity of explanations?

☐ Excellent

☐ Good

☐ Fair

☐ Poor

5. Workshop Materials and Environment

- How would you rate the quality of the materials (handouts, slides, resources) provided and the overall environment (virtual or physical)?

☐ Excellent
☐ Good
☐ Average
☐ Poor
☐ Not Applicable

6. Organization

- **How would you rate the organization and structure of the workshop?**

☐ Excellent

☐ Good

☐ Fair

☐ Poor

7. Overall Experience

7.1 Overall, how satisfied are you with the workshop?

☐ Very satisfied

☐ Satisfied

☐ Neutral

☐ Unsatisfied

7.2 On a scale of 5: Would you recommend this workshop to a colleague?

- ☐ Very Likely

- ☐ Unlikely

7.3 Any additional comments or suggestions?
(Open-ended)

Thank you for your feedback! Your responses are greatly appreciated and will help us improve future workshops.

4.10. Course Specification (CS)

The course specification is created after the program specification is approved and before the course is delivered to students for the first time. It is a document that outlines the plan for each course within the program. However, it can be revised based on feedback from internal and/or external reviewers. The purpose of the course specification is to provide a clear roadmap for the course, ensuring it aligns with the intended learning outcomes of the program. It includes course identification, general information, objectives, description, and topics to be covered. The CS also includes the learning domains and intended learning outcomes, which are in line with the National Qualifications Framework (NQF). Additionally, it outlines the teaching strategies and assessment methods to be used for each learning outcome. The course coordinator, in collaboration with the course instructors, is responsible for preparing the course specification using a designated template from the NCAAA.

❖ **Table of Contents of the Course Specification (NCAAA):**

    A. General information about the course

    B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods: 4

    C. Course Content

    D. Students Assessment Activities

    E. Learning Resources and Facilities

    F. Assessment of Course Quality

    G. Specification Approval Data

❖ **Procedure of the preparation of the course specification:**

1) Prior to each semester, the course coordinator drafts the course specification and distributes it to the course instructors.

2) At the start of every semester, the course coordinator provides an overview of the course specification and roadmap to all the course instructors.

3) The course coordinator supports the staff members in developing the course materials.

4) The program council must approve all course specifications.

❖ **All documents (English format) of programmatic accreditation (postgraduate) can be found on:**
file:///D:/Quality/Master%20Program%20forms/Fatma/national%20center%20for%20academic%20accreditation%20and%20evaluation%20-%20Program%20Accreditation.html

4.11. Course Report (CR)

The course report according to NCAAA is essential for documentation, evaluation, improvement, compliance, and collaboration purposes. It helps in ensuring the quality and effectiveness of the course, promoting continuous enhancement in teaching, and learning practices, and maintaining the standards set by the accrediting body. At the end of each semester, course instructors are required to prepare a course report using the provided NCAAA template. Simultaneously, course coordinators will compile reports for their respective sections (if present) and collect reports from instructors to create a comprehensive course report encompassing all sections. However, in this program one course report is prepared for both male and female students.

❖ **Table of Contents**

    A. Student Results.

    B. Course Learning Outcomes.

    C. Topics not covered.

    D. Course Improvement Plan: (if any).

❖ **Importance of the course report of the NCAAA**

- The course report according to NCAAA is significant for several reasons. Firstly, it serves as a comprehensive record of the course's activities, outcomes, and assessments conducted throughout the semester. This report provides valuable documentation for future evaluation, and accreditation purposes.

- Secondly, the course report helps in assessing the effectiveness of the course in achieving its intended learning outcomes. By analyzing the data and information presented in the report, the course instructor and the program's quality and management can identify areas of strength and weakness in the course design, content, teaching methods, and assessment strategies. This feedback is crucial for making informed decisions and subsequent improvements in the course.

- Moreover, the course report plays a vital role in maintaining transparency and accountability within the educational institution. It provides evidence of adherence to academic standards and guidelines set by NCAAA. This ensures that the course is aligned with national standards, contributing to the overall credibility and reputation of the institution.

- Furthermore, the course report facilitates communication and collaboration among course instructors, coordinators, and other stakeholders involved in the course. It allows for the exchange of ideas, best practices, and recommendations for enhancing the teaching and learning experience.

❖ **All documents (English format) of programmatic accreditation (postgraduate) can be found on:**
file:///D:/Quality/Master%20Program%20forms/Fatma/national%20center%20for%20academic%20accreditation%20and%20evaluation%20-%20Program%20Accreditation.html

4.12. Checklist of Course Portfolio Contents

A course portfolio typically includes a range of materials and documentation that provide a comprehensive overview of a specific course.

No.	Contents
1.	**CV of course coordinator/Instructors**
2.	**Course Specification**
3.	**Course Syllabus/Course Timeline/Semester Plan**
4.	**Course Attendance Sheet**
5.	**Grade Sheet**
6.	**Copy of all the exams with an answer key**
7.	**Course Report**
8.	**Samples of student assessments** *Two samples of each exam (Quizzes, Mid-term, and final exams) with grades and/or feedback. (including lab exams wherever applicable)*
9.	**Samples of student work or projects** *To demonstrate the application of course concepts and skills*
10.	**Learning Materials** *This includes textbooks, readings, lecture notes, handouts, or other resources used to support student learning and understanding of the course content*
11.	**Additional Resources** *Any resources or references that support the course content, such as websites, multimedia materials, or supplementary readings*

4.13. Electronic links to the CS & CR Guides of the Deanship of Development and Quality

جامعــة الأميــر سطام بن عبدالعزيز
PRINCE SATTAM BIN ABDULAZIZ UNIVERSITY

تزامناً مع إعداد تقرير المقرر نهاية الفصل الدراسي يسر عمادة التطوير والجودة بالتعاون مع عمادة الخدمات التعليمية تقديم محتوى رقمي إرشادي لتوصيف المقرر وتقرير المقرر حسب نماذج المركز الوطني للتقويم والاعتماد الأكاديمي

Coinciding with the preparation of the course report at the end of the semester, the Deanship of Development and Quality is pleased, in collaboration with the Deanship of Educational Services, to offer digital guidance content for the Course Specification and Course Report according to the templates of the National Center For Academic Accreditation And Evaluation

Course Specification
TP-153

توصيف المقرر
TP-153

Course Report
TP-154

تقرير المقرر
TP-154

DS-DQ@psau.edu.sa

@ddqPSAU

عمادة التطوير و الجودة

4.14. Electronic links to the PS & PR Guides of the Deanship of Development and Quality

4.15. Required Documents for Review Visit

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

Required Documents for Review Visit (Post graduate Programs)

I. Program self-study Report:

N	Documents	Guidelines
1	Program Self-Study Report	The Self-Study Report provides analytically based narrative aligned with NCAAA standards and it serves as primary foundation of evidence for meeting the requirements.
2	Evidence for the self-study report.	

II. Attachments:

Essential Requirements

Copies of the following essential requirements/documents should be enclosed with the self-study report observing the importance of utilizing them to the related standards.

N	Requirements	Guidelines
1	**Student and staff manuals**	
1.1	Program Handbook	The Program's Handbook for both students and teaching staff that includes Admission and Registration, Study Regulations and Tests, Guidance and Counselling Services, Rights and Duties, Complaints and Grievances.
1.2	Joint Training Manual (if any)	A comprehensive Manual identifying the skills and values targeted, assigning all the responsibilities of the training parties in the institution, program and training sites along with their ethical frameworks.
2	**Program's quality assurance system and its performance reports**	
2-1	Program's quality system manual	
2-2	A manual of policies and procedures for approving, modifying, and reviewing academic programs and courses	
2-3	Annual program report according to NCAAA Templates	For the last two years
2-4	Program's course reports	Two reports for each course for the last two years
2-5	A report on the results of surveys	stakeholders' surveys (students, alumni, employers, teaching staff, employees) for the last year.

◆◆◆◆

N	Requirements	Guidelines
3	**Program and courses specifications**	
3.1	Program specification	According to NCAAA Template
3.2	Course specifications for all courses classified according to levels	All Course specifications should be classified according to their levels in the study plan including the filed experience/joint training courses.
4	**Program Learning Outcomes Assessment**	
4.1	Program learning outcomes assessment Plan	
4.2	Program learning outcomes assessment reports	All PLOs should be assessed and for each PLO to be assessed at least once in the last two years.
5	**Program Learning Outcomes assessment**	
5.1	A report on program consistency with National Qualifications framework (NQF)	According to NCAAA Template.
6	**Academic Research**	
6.1	Operational plan for academic research and its follow-up	• Operational Plan for research in the program (depending on the nature of the program). • System for monitoring and documenting the research activities of the program. • Periodic performance reports of the research plan.
6.2	Academic supervision system on theses, projects, or vocational training	• Guides, regulations, and procedures for scientific supervision of theses, projects or vocational training. • Follow-up scientific supervision reports in the program.

B. Optional Requirements (if any)

N	Requirements	Guidelines
1	Program advisory committee	• Composition and functions of the Committee. • Report on its performance and outcomes.
2	Independent evaluator's report	Independent evaluator's report and the Program's response to its recommendations (areas and priorities for improvement).

◆◆◆◆

APPROVAL SHEET

The "Program quality system manual"

The Master of Pharmaceutical Sciences/ "Assessment and Applications of Phytotherapeutic Drugs"

Was approved by:

COUNCIL /COMMITTEE	**The Department Council**
DEPARTMENT	**Department of Pharmacognosy**
COLLEGE	**College of Pharmacy**
INSTITUTION	**Prince Sattam bin Abdulaziz University**
REFERENCE NO.	**The 9th Council Meeting**
ACADEMIC YEAR	**2023-2024 (1445 H)**
DATE	**January 2024**
VERSION	**V1.0**
HEAD OF THE DEPARTMENT	**Mohammed Hamed Saeed Alqarni**
SIGNATURE	