Program Specification
▬ (Bachelor)

Program: **Pharmaceutical Sciences**	
Program Code (as per Saudi university ranking): **09160204**	
Qualification Level: 6	
Department: N/A	
College: Pharmacy	
Institution: Najran University	
Program Specification: New ☐ updated* ☒	
Last Review Date: 16/10/2024	

*Attach the previous version of the Program Specification.

Table of Contents

A. Program Identification and General Information

1. Program's Main Location :

Collage of Pharmacy - Najran University Campus

2. Branches Offering the Program (if any):

None

3. Partnerships with other parties (if any) and the nature of each:

None

4. Professions/jobs for which students are qualified

The program aims at graduating qualified pharmacist to work in the following sectors:
1. Pharmacies: Community and Hospital Pharmacies
2. Drug and Poison Information Centers (DPICs)
3. General Analytical Labs for Drug such as Therapeutic Drug Monitoring Labs (TDM), Quality Control and Food Analysis Centers
4. Pharmaceutical industry.
5. Medical Representation and promotion for Pharmaceutical Companies.
6. Faculty member (Research and Development; R&D)
7. Supervision and Managerial Roles
8. Drug Stores
9. Complementary and alternative medicine centers
10. Food and Drug Authority (FDA)

5. Relevant occupational/ Professional sectors:

None

6. Major Tracks/Pathways (if any):

Major track/pathway	Credit hours (For each track)	Professions/jobs (For each track)
None		

7. Exit Points/Awarded Degree (if any):

exit points/awarded degree	Credit hours
Advanced Diploma in Pharmaceutical Sciences (details of credit hours in **the** link)	94

8. Total credit hours: (207 Hours)

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B. Mission, Objectives, and Program Learning Outcomes

1. Program Mission:

Preparing qualified and professional pharmacists who are able to compete in the labor market and contribute to the improvement of health care and scientific research.

2. Program Goals:

1. To provide students with basic knowledge and concepts in the pharmaceutical field and related sciences.
2. To provide students with basic skills for professional pharmacy practice.
3. To improve health care for the community.
4. To develop the students' skills in scientific pharmaceutical research.
5. To improve students' career opportunities through pharmaceutical field training.

3. Program Learning Outcomes*

	Knowledge and Understanding
K1	Demonstrate specialized knowledge and understanding in biomedical, pharmaceutical, clinical, social, behavioral, administrative sciences and research methodology in relation to the development and use of medications including natural therapies for prevention and treatment
K2	Demonstrate an in-depth knowledge of the concepts of pharmacy practice settings including the role of pharmacists according to legal, ethical and professional standards in promoting health prevention and treatment
K3	Demonstrate knowledge of physicochemical properties and structural activity relationships for general classes of drugs to serve as a background for drug development process and manufacturing
	Skills
S1	Integrate pharmaceutical, administrative and clinical sciences with information obtained from different resources to provide accurate recommendations and creative solutions for complex problems
S2	Evaluate scientific and professional literature critically to be utilized in evidence-based practice and conducting research
S3	Demonstrate pharmaceutical calculation, formulation, isolation, compounding and basic drug development skills in relevant pharmacy professions using advanced techniques, tools and instruments
S4	Utilize appropriate information technologies to optimize safe medication use and patient care
S5	Communicate clearly and effectively in a collaborative manner with health care professionals, patients, caregivers, administrative staff, supportive personnel and the public
	Values, Autonomy, and Responsibility

V1	Demonstrate empathy, professional attitude, ethical and legal behavior, integrity, trustworthiness, social and cultural awareness and self-awareness and proper judgment in relevant practice settings
V2	Advocate patient rights to safe and effective medication use in relevant practice setting
V3	Engage in self-learning practices and inter-professional healthcare education activities
V4	Demonstrate leadership, entrepreneurial and managerial skills, in addition to accountability, confidence, reflective reasoning and independent thinking to respond to routine or unanticipated circumstances

* Add a table for each track or exit Point (if any)

C. Curriculum

1. Curriculum Structure

Program Structure	Required/ Elective	No. of courses	Credit Hours	Percentage
Institution Requirements	Required	5	10	4.83%
	Elective			
College Requirements	Required	12	34	16.42%
	Elective			
Program Requirements	Required	48	127	61.35%
	Elective	3	6	2.89%
Capstone Course/Project		NA	NA	NA
Field Training/ Internship	Required	2	20	9.67%
	Elective	1	10	4.84%
Residency year		NA	NA	NA
Others		None	None	None
Total		71	207	100%

* Add a separate table for each track (if any).

2. Program Courses

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
		1st Year				
Level 1	111-ENG-4	English Language Skills-1	Required	---	4	College
	112-ENG-4	English Language Skills-2	Required	---	4	College
	100-CSC-2	Computer Applications	Required	---	2	College
	151-SKL-2	University Life Skills	Required	---	2	College
	161-BIO-3	Biology-1	Required	---	3	College
	171-CHM-2	General Chemistry	Required	---	2	College
		Total			**17**	
Level 2	113-ENG-3	General English	Required	---	3	College
	114-ENG-3	English for Health Specialties	Required	112-ENG-4	3	College
	123-STA-2	Biostatistics	Required	---	2	College
	141-PHY-3	General Physics	Required	---	3	College
	162-BIO-3	Biology-2	Required	---	3	College
	172-CHM-3	Organic Chemistry	Required	---	3	College
		Total			**17**	
		2nd Year				
Level 3	111-TQF-2	Muslim Culture-1	Required	Complete the preparatory year's courses	2	Institution
	211-PHC-3	Pharmaceutical Organic Chemistry	Required	Complete the preparatory	3	Program

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
				year's courses		
	231-PHU-3	Pharmaceutical Calculations	Required	Complete the preparatory year's courses	3	Program
	241-PHL-3	Anatomy and Histology	Required	Complete the preparatory year's courses	3	Program
	242-PHL-3	Physiology	Required	Complete the preparatory year's courses	3	Program
	243-PHL-3	Biochemistry	Required	Complete the preparatory year's courses	3	Program
	251-PHP-1	Introduction to Pharmacy Profession	Required	Complete the preparatory year's courses	1	Program
		Total			**18**	
Level 4	101-CIS-2	Digital Skills	Required	---	2	Institution
	212-PHC-4	Pharmaceutical Analytical Chemistry	Required	---	4	Program
	221-PHG-3	Pharmacognosy-1	Required	---	3	Program
	232-PHU-3	Pharmaceutical Microbiology- 1	Required	---	3	Program
	233-PHU-3	Pharmaceutics- 1	Required	231-PHU-3	3	Program
	252-PHP-3	Pathology	Required	242-PHL-3	3	Program
		Total			**18**	
		3rd Year				
Level 5	212-TQF-2	Muslim Culture-2	Required	---	2	Institution
	311-PHC-3	Medicinal Chemistry-1	Required	211-PHC-3	3	Program
	321-PHG-3	Pharmacognosy-2	Required	221-PHG-3	3	Program
	331-PHU-3	Physical Pharmacy	Required	233-PHU-3	3	Program
	332-PHU-3	Pharmaceutical Microbiology- 2	Required	232-PHU-3	3	Program
	341-PHL-3	Pharmacology- 1	Required	242-PHL-3	3	Program
	351-PHP-1	Regulations and Ethics of Pharmacy	Required	---	1	Program
		Total			**18**	
Level 6	312-PHC-3	Medicinal Chemistry-2	Required	311-PHC-3	3	Program
	322-PHG-3	Pharmaceutical Biotechnology	Required	321-PHG-3	3	Program
	323-PHG-3	Recent Approaches in Analysis of Medicinal Plants	Required	321-PHG-3	3	Program
	333-PHU-3	Pharmaceutics- 2	Required	331-PHU-3	3	Program
	334-PHU-3	Basic Pharmacokinetics	Required	331-PHU-3	3	Program
	342-PHL-3	Pharmacology- 2	Required	341-PHL-3	3	Program

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
		Total			**18**	
		4th Year				
Level 7	101-ARB-2	Arabic Language Skills	Required	---	2	Institution
	411-PHC-3	Medicinal Chemistry-3	Required	312-PHC-3	3	Program
	431-PHU-3	Pharmaceutics- 3	Required	333-PHU-3 334-PHU-3	3	Program
	441-PHL-3	Pharmacology- 3	Required	342-PHL-3	3	Program
	451-PHP-3	Pharmacotherapy-1	Required	341-PHL-3	3	Program
	452-PHP-2	Pharmacy practice- 1	Required	351-PHP-1	2	Program
	453-PHP-2	Clinical Skills for Pharmacist	Required	---	2	Program
		Total			**18**	
Level 8	412-PHC-1	Drug Discovery and Development	Required	411-PHC-3	1	Program
	432-PHU-3	Industrial Pharmacy	Required	431-PHU-3	3	Program
	433-PHU-3	Sterile Dosage Forms	Required	431-PHU-3	3	Program
	442-PHL-2	Pharmacology- 4	Required	441-PHL-3	2	Program
	454-PHP-2	Pharmacy practice- 2	Required	452-PHP-2	2	Program
	455-PHP-2	Research Methodology	Required	---	2	Program
	456-PHP-3	Pharmacotherapy-2	Required	451-PHP-3	3	Program
	---	Elective Course - Group No. 1	Elective	---	2	Program
		Total			**18**	
		5th Year				
Level 9	511-PHC-3	Instrumental Analysis of Pharmaceutical Compounds	Required	411-PHC-3	3	Program
	531-PHU-2	Cosmetic Preparations	Required	432-PHU-3	2	Program
	532-PHU-2	Pharmaceutical Quality Control and Good Manufacturing Practice	Required	432-PHU-3	2	Program
	541-PHL-3	Toxicology	Required	442-PHL-2	3	Program
	551-PHP-3	Pharmacotherapy-3	Required	456-PHP-3	3	Program
	561-PHR-3	Research Project-1	Required	455-PHP-2	3	Program
	---	Elective Course - Group No. 2	Elective	---	2	Program
		Total			**18**	
Level 10	102-NAT-2	National Identity	Required	---	2	Institution
	521-PHG-2	Herbal and Alternative Medicine	Required	323-PHG-3	2	Program
	552-PHP-1	Pharmaceutical Marketing	Required	454-PHP-2	1	Program
	553-PHP-2	Drug and Poison Information	Required	455-PHP-2	2	Program
	554-PHP-3	Pharmacotherapy-4	Required	551-PHP-3	3	Program
	555-PHP-2	Pharmacoepidemiology	Required	455-PHP-2	2	Program
	562-PHR-3	Research Project-2	Required	561-PHR-3	3	Program
	---	Elective Course - Group No. 3	Elective	---	2	Program
		Total			**17**	
Level	671-PHT-10	Community Pharmacy	Required	Complete all courses	10	Program

Level	Course Code	Course Title	Required or Elective	Pre-Requisite Courses	Credit Hours	Type of requirements (Institution, College, or Program)
11	672-PHT-10	Hospital Pharmacy	Required	Complete all courses	10	Program
		Elective Course - Group No. 4	Elective	Complete all courses	10	Program
	Total				30	
	Total number of credit hours				207	

Elective Courses		
Elective Course - Group No. 1		
Number	**Course Code**	**Course Title**
1	111-HLE-2	Health Education
2	201-HST-2	The History of Saudi Arabia
3	421-PHG-2	Drug-Herb Interactions
4	434-PHU-2	Drug Delivery Systems
5	443-PHL-2	Pharmacology of Vitamins
6	457-PHP-2	Clinical Pharmacokinetics
Elective Course - Group No. 2		
Number	**Course Code**	**Course Title**
1	512-PHC-2	Computational Chemistry
2	513-PHC-2	Structural Elucidation of Chemical Compounds
3	522-PHG-2	Nutraceuticals
4	533-PHU-2	Pharmaceutical Engineering
5	542-PHL-2	Geriatric Pharmacology
6	556-PHP-2	Non-Prescription and Self-Care Medications
7	557-PHP-2	Pharmacy Practice-3
Elective Course - Group No. 3		
Number	**Course Code**	**Course Title**
1	523-PHG-2	Drug of Abuse
2	534-PHU-2	Advanced Pharmaceutical Formulations
3	535-PHU-2	Nuclear Pharmacy
4	543-PHL-2	Pharmacogenomics and Pharmacogenetics
5	558-PHP-2	Pharmacoeconomics
6	559-PHP-2	Pharmacovigilance
Elective Course - Group No. 4		
Number	**Course Code**	**Course Title**
1	673-PHT-10	Pharmaceutical Industry
2	674-PHT-10	Drug and Poison Information Center

3	675-PHT-10	Ambulatory Care
4	676-PHT-10	Research Center
5	677-PHT-10	Drug Authority

* Include additional levels (for three semesters option or if needed).
** Add a table for the courses of each track (if any)

3. Course Specifications:

Insert hyperlink for all course specifications using NCAAA template (T-104)

https://pharmacy.nu.edu.sa/179

4. Program learning Outcomes Mapping Matrix:

Align the program learning outcomes with program courses' according to the following desired performance levels *(I = Introduced & P = Practiced & M = Mastered).*

Course code & No.	Program Learning Outcomes											
	Knowledge and understanding			Skills					Values, Autonomy, and Responsibility			
	K1	K2	K3	S1	S2	S3	S4	S5	V1	V2	V3	V4
111-ENG-4								I			I	
112-ENG-4								I			I	
131-TEC-2								I			I	
151-SKL-2								I			I	
161-BIO-3	I							I			I	
171-CHM-2			I			I					I	
113-ENG-3	I							I			I	
114-ENG-3								I			I	
123-MAT-2	I			I								I
141-PHY-3			I					I			I	
162-BIO-3	I							I			I	
172-CHM-3			I			I					I	
111-TQF-2									I			
101-CIS-2									I			
101-ARB-2							I		I			
212-TQF-2									I			
102-NAT-2									I			
211-PHC-3		I	I			I		I				I
231-PHU-3	I					I			I			
241-PHL-3	I			I						I	I	

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Course code & No.	Program Learning Outcomes											
	Knowledge and understanding			Skills					Values, Autonomy, and Responsibility			
	K1	K2	K3	S1	S2	S3	S4	S5	V1	V2	V3	V4
242-PHL-3	I			I						I	I	
243-PHL-3	I			I						I	I	
251-PHP-1	I			I	I				I	I		
212-PHC-4			I	I		I		I				I
221-PHG-3	I			I	I				I			
232-PHU-3	I		I			I						I
233-PHU-3	I		I			I			I			
252-PHP-3	I			I					I		I	
311-PHC-3			I	I				I				I
321-PHG-3	I			I	I				I			
331-PHU-3			I			I						I
332-PHU-3	I		I			I						I
341-PHL-3	I			I	I				I	I		
351-PHP-1		I						I	I	I		
312-PHC-3			I	I				I				I
322-PHG-3	P			P					P			
323-PHG-3			P			P						P
333-PHU-3	P		P			P			P			
334-PHU-3	P		P			P			P			
342-PHL-3	P			P	P				P	P		
411-PHC-3			P	P				P				P
431-PHU-3	P		P			P			P			
441-PHL-3	P			P	P				P	P		
451-PHP-3	P	P		P	P		P	P	P	P	P	P
452-PHP-2	P	P		P	P		P	P	P	P	P	P
453-PHP-2	P	P		P			P	P	P			P
412-PHC-1			P	P				P				P
432-PHU-3	P		P			P			P			
433-PHU-3	P		P			P			P			
442-PHL-2	M			M	M				M	M		
454-PHP-2	M	M		M	M		M	M	M	M	M	M
455-PHP-2	M		M		M		M	M	M		M	M
456-PHP-3	M	M		M	M		M	M	M	M	M	M
511-PHC-3			M	M		M		M				M
531-PHU-2	M		M			M						M
532-PHU-2			M			M						M
541-PHL-3	M			M	M				M	M		

Course code & No.	Program Learning Outcomes											
	Knowledge and understanding			Skills					Values, Autonomy, and Responsibility			
	K1	K2	K3	S1	S2	S3	S4	S5	V1	V2	V3	V4
551-PHP-3	M	M		M	M		M	M	M	M	M	M
561-PHR-3	M			M								M
521-PHG-2		M		M						M		
552-PHP-1	M	M		M	M		M	M	M		M	M
553-PHP-2	M	M		M	M		M	M	M		M	M
554-PHP-3	M	M		M	M		M	M	M	M	M	M
555-PHP-2		M			M		M			M		M
562-PHR-3	M			M								M
671-PHT-10		M					M	M	M	M	M	M
672-PHT-10		M		M			M	M	M	M	M	M
Elective Courses												
Elective Courses - Group No. 1												
111-HLE-2	I							I			I	
201-HST-2									I			
421-PHG-2	P			P						P		
434-PHU-2	P					P			P			
443-PHL-2	P			P	P				P	P		
457-PHP-2	P	P		P	P		P			P	P	P
Elective Courses - Group No. 2												
512-PHC-2			P		P							P
513-PHC-2			P		P		P					P
522-PHG-2		P		P						P		
533-PHU-2	P					P			P			
542-PHL-2	P			P	P				P	P		
556-PHP-2	P		P	P			P	P	P	P	P	
557-PHP-2	P	P		P	P		P	P	P	P	P	P
Elective Courses - Group No. 3												
523-PHG-2		P		P						P		
534-PHU-2	P		P			P			P			
535-PHU-2	P		P			P			P			
543-PHL-2	P			P	P				P	P		
558-PHP-2		P			P					P		P
559-PHP-2		P			P					P		P
Elective Courses - Group No. 4												
673-PHT-10			P			P			P			P
674-PHT-10		P		P	P		P	P	P	P	P	P
675-PHT-10		P		P			P	P	P	P	P	P
676-PHT-10		P		P	P		P	P	P		P	P
677-PHT-10		P					P	P			P	P
Extracurricular Activities												
Extracurricular Activities	P	P	P	P	P	P	P	P	P	P	P	P

Course code & No.	Program Learning Outcomes											
	Knowledge and understanding			Skills					Values, Autonomy, and Responsibility			
	K1	K2	K3	S1	S2	S3	S4	S5	V1	V2	V3	V4

* Add a separate table for each track (if any).

5. Teaching and learning strategies applied to achieve program learning outcomes.

Describe teaching and learning strategies and curricular and extra-curricular activities adopted to achieve the Program's learning outcomes in all areas.

Domains	PLOs	Teaching and learning strategies applied to achieve program learning outcomes
Knowledge and Understanding	K1	• Lectures • Laboratory work • Problem-based learning • Group discussion • Role-plays • Case studies or multimedia instructions
	K2	• Lectures • Laboratory work • Problem-based learning • Group discussion • Role-plays • Case studies or multimedia instructions
	K3	• Lectures • Laboratory work • Group discussion • Problem-based learning
Skills	S1	• Lectures • Laboratory work • Data interpretation exercises • Group discussion • Active learning • Problem-based learning • Role-plays • Case studies or multimedia instruction • Field trip or visit to a hospital or pharmaceutical industry • Pharmaceutical training
	S2	• Lectures • Laboratory work • Data interpretation exercises • Group discussion • Active learning • Problem-based learning • Role-plays • Case studies or multimedia instruction • Field trip or visit to a hospital or pharmaceutical industry • Pharmaceutical training
	S3	• Lectures • Laboratory work • Group discussion • Problem-based learning • Case studies • Data interpretation exercises
	S4	• Lectures • Laboratory work • Data interpretation exercises • Group discussion

		• Active learning • Problem-based learning • Role-plays • Case studies or multimedia instruction • Field trip or visit to a hospital or pharmaceutical industry • Pharmaceutical training
	S5	• Lectures • Laboratory work • Group discussion • Problem-based learning • Role-plays • Case studies or multimedia instruction • Field trip or visit to a hospital or pharmaceutical industry • Pharmaceutical training
Values, Autonomy and Responsibility	**V1**	• Practice sessions • Problem-based learning • Lectures or tutorials • Small group discussion • Poster presentation and seminars • Pharmaceutical training
	V2	• Practice sessions • Problem-based learning • Lectures or tutorials • Small group discussion • Poster presentation and seminars • Pharmaceutical training
	V3	• Practice sessions • Problem-based learning • Lectures or tutorials • Small group discussion • Poster presentation and seminars • Pharmaceutical training
	V4	• Practice sessions • Problem-based learning • Lectures or tutorials • Small group discussion • Poster presentation and seminars • Pharmaceutical training

	Teaching and learning strategies applied to achieve program learning outcomes
Extracurricular Activities	• Participate in the pharmacy students club events. • Participate in students' activities unit initiatives, and scientific events. • Participate in community service initiatives. • Attend personal development lectures and workshops. • Attend national and international scientific conferences and seminars. • Participate in students' scientific competitions.

6. Assessment Methods for program learning outcome

Describe assessment methods (Direct and Indirect) that can be used to measure the achievement of program learning outcomes in all areas.

The Program should devise a plan for assessing Program Learning Outcomes (all learning outcomes should be assessed at least twice in the bachelor program's cycle and once in other degrees).

Domains	PLOs	Direct assessment methods	Indirect assessment methods

Knowledge and Understanding	K1	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Assignments (using rubrics) • Practical exam • Presentations (using rubrics) • Reports (using rubrics)	Course evaluation survey Alumni survey Stakeholders survey Student exit survey Interviews Focus group discussion
	K2	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Assignments (using rubrics) • Practical exam • Presentations (using rubrics) • Reports (using rubrics)	
	K3	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Assignments (using rubrics) • Presentations (using rubrics) • Practical exam • Reports (using rubrics)	
Skills	S1	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Oral examination (using rubrics) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	Course evaluation survey Alumni survey Stakeholders survey Student exit survey Interviews Focus group discussion
	S2	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Oral examination (using rubrics) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	
	S3	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	
	S4	• Written exams with multiple choice questions (MCQs) and short-answer questions (Quizzes, Mid-term and Final exams) • Oral examination (using rubrics) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	
	S5	• Oral examination (using rubrics) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	
Values, Autonomy and Responsibility	V1	• Assignments (using rubrics) • Presentations (using rubrics) • Practical exam • Observation card (using rubrics) • Reports (using rubrics)	Course evaluation survey Alumni survey Stakeholders survey Student exit survey Interviews
	V2	• Observation card (using rubrics) • Assignments (using rubrics)	

			Focus group discussion
		• Presentations (using rubrics) • Practical exam • Reports (using rubrics)	
	V3	• Assignments (using rubrics) • Presentations (using rubrics) • Reports (using rubrics) • Observation card (using rubrics)	
	V4	• Observation card (using rubrics) • Assignments (using rubrics) • Reports (using rubrics) • Presentations (using rubrics) • Practical exam	

D. Student Admission and Support:

1. Student Admission Requirements

1- Meeting the University's general admission requirements:
The following requirements are required for a new student to be accepted into the University:
- **A-** Obtaining a Secondary education qualification or equivalent.
- **B-** Performing all required tests by the University.
- **C-** The student who meets the required conditions must submit the documents required by the Deanship of Admission and Registration at the University on the date and location specified by the University, and according to the announced conditions.
- **D-** The student must not have been academically or disciplinary expelled from Najran University or any other university, taking into account what was stated in Paragraph (4) of Article (20) in the Study and Examination Regulation.
- **E-** Admission of non-Saudi internal and external scholarship students is subjected to the regulating rules.
- **F-** The student must be medically fit for the specialty to which he is accepted.
- **G-** The colleges councils, according to their capacity, propose admission conditions and the number of students who can be accepted each academic year.

2- Meeting the admission requirements for the preparatory year before joining the Bachelor of Pharmaceutical Sciences program:
The preparatory year requires a minimum of 75% based on:
- 40% of the General Aptitude Test (GAT).
- 30% of the Standard Achievement Admission Test (SAAT).
- 30% of the Secondary education qualification (scientific).

3- Meeting the admission requirements at the College of Pharmacy for the Bachelor of Pharmaceutical Sciences program:
Admission to the preparatory year does not guarantee admission to the College of Pharmacy, and the student must meet the following conditions to enroll in the Bachelor of Pharmaceutical Sciences program:
- **A-** GPA must not be less than 4 out 5.
- **B-** The student must complete all preparatory year courses.
- **C-** Admission to the program is annual.
- **D-** The student must be medically fit.

2. Guidance and Orientation Programs for New Students

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

1- Advising the admitted students on the nature of study in the college including the curriculum is performed through orientation programs offered at the beginning of the year. This orientation is prepared by the Academic Advising Unit and the dean, vice deans, heads of the departments, and faculty members attend this orientation.
2- The vice dean for academic affairs introduces the student's rules and rights in the college and emphasizes the importance of academic advising services.
3- Particular attention is given to the preparation of the program's students for the English language and self-learning.

4- Academic and tutorial assistance is provided to ensure students' understanding and their ability to apply learning.

5- The Student Activities Unit and Pharmacy Student Club, offer a comprehensive and diverse program for extracurricular activities, such as sports, community services, and training courses in various areas.

6- The program administration specifies the academic advisors for the new students.

3. Student Counseling Services

(Academic, professional, psychological, and social)

(Include only the exceptional needs offered to the students of the Program that differ from those provided at the institutional level).

The Academic Advising Unit at the College of Pharmacy is responsible for planning, supervising and following up the academic advising process at the College. All faculty members share responsibility for academic guidance for students, and the unit works in coordination and cooperation with the University's Guidance and Counseling Unit.

The objectives of academic advising at the College of Pharmacy are based on the following:

A- Raising the awareness of academic advising importance among students and providing guidance and advice to them whenever necessary.

B- Helping students to integrate and adapt to the academic and educational environment.

C- Increasing the effectiveness and efficiency of academic advising in the college.

D- Motivating academically distinguished students.

E- Discovering and supporting students who are struggling academically.

F- Supporting gifted and creative students.

G- Helping students to find direct solutions to the academic problems they face through the college's academic advisors.

H- Providing students with the opportunity to benefit directly and indirectly from the expertise of faculty members outside the classroom through the Pharmacy Student Club.

I- For students who need special psychological and social counseling, the Academic Advising Unit refers them to the University's Guidance and Counseling Unit which has experts in these fields.

Duties of the academic advisor:

1. Student's academic counseling system in the program is essentially staffed by the program teaching members in the college with the necessary professional qualifications and well-versed in academic program policies.

2. Effective communication with students and making periodic meetings with each student to discuss the student's study plan and academic schedule, and then filling out the relevant form for registering courses during the drop and add period determined by the University.

3. Following up on students' performance and evaluating their performance during the study period and providing needed guidance and advice to them.

4. Identifying students who are struggling academically and conducting interviews with them to identify the reasons for these difficulties and try to find appropriate solutions to overcome them and filling out the relevant form and then submit it to the academic advising unit in the college.

5. Identifying gifted and academically talented students and developing an appropriate plan to care for them.
6. Academic advisor connects students with key academic and career support, student development services and with the social, psychological and medical advising agents as needed.

The Link for the Academic Advising Unit is now present on the college website and links for Important resources, rules, and regulations for the student in this table:

Academic Advising Unit- College of Pharmacy	**Link**
Study and exams regulation	**Link**
Guide to electronic services	**Link**
University student behavior and discipline rules	**Link**
Complaint form	**Link**
Admission dates	**Link**
Student programs kit	**Link**
Educational lessons for students	**Link**
Student housing regulations	**Link**
Regulations for using smartphones within the university campus	**Link**
Regulatory statute for student clubs	**Link**
Regulatory statute for the Student Advisory Council at Najran University	**Link**

4. Special Support

(Low achievers, disabled, gifted, and talented students).

- **Mechanism for dealing with outstanding students:**

Outstanding students are students who have high achievement abilities that enable them to achieve high academic averages in their field of study (GPA of 4 out of 5) and higher. In order to encourage students to improve their academic standing, students whose academic averages improved during the last 3 semesters (obtained an academic average of 4 out of 5) will be identified, regardless of their GPA. The names of outstanding students are determined by the academic advisor.

- **Encouragements for outstanding students:**
1. Announcing the names of outstanding students on the college's honor board and through the college's X account.
2. Issuing honorary certificates to outstanding students and honoring them during the annual ceremony held by the college.
3. Giving valuable prizes.

- **Mechanism for dealing with creative or gifted students:**

Creative or gifted students are students who have distinctive abilities in one of the various areas of life - scientific, cultural, social, or sports. The names of creative or gifted students are determined by the academic advisor through the specified form.

- **Encouragements for creative or gifted students:**

1. Issuing honorary certificates to creative or gifted students and honoring them during the annual ceremony held by the college.
2. Giving valuable prizes.
3. Sponsoring creative or talented students by nominating them to participate in specialized forums or courses in the field of their creativity.
4. Urging creative or talented students to participate in local and regional competitions that focus on their creativity and to contribute to the activities of the Pharmacy Student Club as well as the events and initiatives that the college holds periodically.

- **Mechanism for dealing with low achiever students:**

Low achiever students are students whose GPA is less than 2 out of 5 or who have failed any course more than once. The names of low achiever students are determined by the academic advisor who works with the students to overcome any related reasons.

- Suggestions to improve the academic condition of low achiever students:

1. Writing a detailed report for each student on the reasons for stumbling from the perspective of the student and the academic advisor and submitting it to the college's Academic Advising Unit.
2. All reports from academic advisors on low achiever students are collected by the college's Academic Advising Unit, and then a unified report is written about the causes of failure in program courses and ways to overcome them and submitted to the dean of the college or vice dean for educational affairs to study it and find appropriate solutions.

E. Faculty and Administrative Staff:

1. Needed Teaching and Administrative Staff

Academic Rank	Specialty		Special Requirements / Skills (if any)	Required Numbers		
	General	Specific		M	F	T
Professor	Pharmaceutical Chemistry	Organic Chemistry	---	1	1	10
		Analytical Chemistry	---			
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---	1	1	
		Natural Products Chemistry	---			
		Natural Products Biotechnology	---			
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---	1	1	
		Industrial Pharmacy	---			
		Pharmaceutical Quality Assurance	---			
		Pharmaceutical Microbiology	---			
	Pharmacology	Pharmacology	---	1	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---	1	1	
		Pharmacokinetic	---			
		Pharmacoeconomic	---			
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Associate Professor	Pharmaceutical Chemistry	Organic Chemistry	---	2	1	14
		Analytical Chemistry	---			
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---	1	1	
		Natural Products Chemistry	---			
		Natural Products Biotechnology	---			
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---	3	1	
		Industrial Pharmacy	---			
		Pharmaceutical Quality Assurance	---			
		Pharmaceutical Microbiology	---			
	Pharmacology	Pharmacology	---	1	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---	2	1	
		Pharmacokinetic	---			
		Pharmacoeconomic	---			
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Assistant Professor	Pharmaceutical Chemistry	Organic Chemistry	---	2	1	16
		Analytical Chemistry	---			
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---	2	---	
		Natural Products Chemistry	---			
		Natural Products Biotechnology	---			
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---	4	---	
		Industrial Pharmacy	---			

	Pharmacology	Pharmaceutical Quality Assurance	---			
		Pharmaceutical Microbiology	---			
		Pharmacology	---	1	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---			
		Pharmacokinetic	---			
		Pharmacoeconomic	---	3	2	
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Lecturer	Pharmaceutical Chemistry	Organic Chemistry	---			
		Analytical Chemistry	---	2	2	
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---			
		Natural Products Chemistry	---			
		Natural Products Biotechnology	---	1	1	
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---			**15**
		Industrial Pharmacy	---			
		Pharmaceutical Quality Assurance	---	2	1	
		Pharmaceutical Microbiology	---			
	Pharmacology	Pharmacology	---	2	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---			
		Pharmacokinetic	---			
		Pharmacoeconomic	---	2	1	
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Teaching Assistant	Pharmaceutical Chemistry	Organic Chemistry	---			
		Analytical Chemistry	---	1	1	
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---			
		Natural Products Chemistry	---			
		Natural Products Biotechnology	---	---	1	
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---			**9**
		Industrial Pharmacy	---	1	1	
		Pharmaceutical Quality Assurance	---			
		Pharmaceutical Microbiology	---			
	Pharmacology	Pharmacology	---	1	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---			
		Pharmacokinetic	---			
		Pharmacoeconomic	---	1	1	
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Technicians and Laboratory Assistant	Pharmaceutical Chemistry	Organic Chemistry	---			
		Analytical Chemistry	---	2	2	
		Medicinal Chemistry	---			
	Pharmacognosy	General Pharmacognosy	---			
		Natural Products Chemistry	---			**14**
		Natural Products Biotechnology	---	1	1	
		Alternative and Complementary Medicine	---			
	Pharmaceutics	General Pharmaceutics	---			
		Industrial Pharmacy	---	2	2	
		Pharmaceutical Quality Assurance	---			

		Pharmaceutical Microbiology	---			
	Pharmacology	Pharmacology	---	1	1	
		Toxicology	---			
	Clinical Pharmacy	Pharmacy Practice	---	1	1	
		Pharmacokinetic	---			
		Pharmacoeconomic	---			
		Pharmacoepidemiology	---			
		Pharmacy Administration	---			
Administrative and Supportive Staff	**Pharmaceutical Chemistry**	Pharmaceutical Chemistry	---	1	1	**10**
	Pharmacognosy	Pharmacognosy	---	1	1	
	Pharmaceutics	Pharmaceutics	--	1	1	
	Pharmacology	Pharmacology	--	1	1	
	Clinical Pharmacy	Clinical Pharmacy	--	1	1	
Others (specify)	---	---	---	---	---	---

F. Learning Resources, Facilities, and Equipment:

1. Learning Resources

Learning resources required by the Program (textbooks, references, e-learning resources, web-based resources, etc.)

1. The courses' coordinators recommend the learning resources of the courses and write them in the course specifications. This can include textbooks, references, electronic resources, and web-based resources for each course.
2. The departments revise the courses' learning resources recommended by the courses' coordinators and approve them by the departments' councils.
3. Each course coordinator informs the students registering for the course through the course specification with all required learning resources.
4. The program ensures the quality of learning resources via students' and teaching staff's surveys.
5. The program analyzes and evaluates the surveys-based data and recommends the improvement action plan for its continuous improvement.
6. The college has access to many electronic resources that are available in the Saudi Digital Library (SDL) that includes AccessPharmacy and UpToDate, in addition to many scientific articles.
7. The program established the botanical garden which helps in teaching many courses in the program.
8. The program proposed establishing a virtual pharmacy lab, which will improve the teaching experience in clinical and pharmacy practice courses.

2. Facilities and Equipment

(Library, laboratories, classrooms, etc.)

The pharmaceutical sciences program facilities allow effective and efficient learning and high-quality research-centered teaching via a variety of methods in a conducive learning environment. The perfect use of these facilities and equipment enables students to take responsibility for their own learning. The use of these facilities and equipment is assessed regularly in terms of their suitability for all stakeholders, i.e. students, faculty, employers, and staff.

1. The university collects all learning resources of all university programs in a central library riches with the required references (except equipment). Prince Mishaal Central Library has state-of-the-art facilities with a vast collection of textbooks.
2. Deanship of Library Affairs https://dlaf.nu.edu.sa/en/home provides access for The digital library: https://sdl.edu.sa/SDLPortal/ar/Publishers.aspx
3. The existence of information security systems against electronic threats.
4. The program provides a computer laboratory equipped with computers and software and is open from 8 AM to 5 PM on all working days. Underutilized computers of the lab are restructured and rearranged for better utilization by staff and students.
5. The program provides classrooms equipped with both blackboards, smart boards, and data show equipment.

6. Each classroom is equipped with smart boards. Faculty members are trained by Deanship of E-learning and Distance Education on smart boards and E-learning system. The program provides well-equipped laboratories in all departments.

7. NU introduces policies so that the planning, acquisition and maintenance of all colleges' facilities and equipment are efficient and useful. Thus, clearly organized processes exist for the acquisition of facilities which include tendering processes, procedures for procurement and invoicing systems to log and track inventories.

8. There is also a well-tracked documented system throughout the University for the maintenance and repair of facilities, as well as a well-defined system for planning and budgeting, involving certain academic and administrative units in NU.

9. The entrances of the College buildings are reconstructed to consider the needs of persons with physical disabilities or other special needs.

Classrooms and labs. in the College of Pharmacy

Classrooms	Practical labs	Computer labs	Video conference Rooms
26 Classrooms	31 Labs	3	1

3. Procedures to ensure a healthy and safe learning environment

(According to the nature of the Program)

1. The mechanism of security and safety is prepared and announced to the faculty members, technicians, researchers, and students.

2. The mechanism of equipment's periodic maintenance is maintained electronically.

3. Standard Operating Procedure (SOP) defines the use of equipment procedure and security, safety and behavioral aspects of laboratory units.

4. Hazardous waste disposal standards are applied efficiently and effectively in all laboratories.

5. Periodic evaluation of teaching and learning facilities at the program level are conducted and results and actions are evaluated accordingly.

https://pharmacy.nu.edu.sa/232

G. Program Quality Assurance:

1. Program Quality Assurance System

Provide a link to the quality assurance manual.

For the Quality Management System Handbook of College of Pharmacy, please click on the following link:

https://pharmacy.nu.edu.sa/en/120

2. Procedures to Monitor Quality of Courses Taught by other Departments

1. Supply all departments with the program specification, objectives and learning outcomes and their matrices.
2. At the beginning of the semester, each faculty member must submit a course specification for his course, which must be consistent with the learning outcomes of the program mentioned in the program specification. This course specification is reviewed and approved by the department council.
3. Every course instructor prepares the course report at the end of each semester that contains details about the course delivery and results. The course reports are sent to the Teaching and Learning Unit along with the course specification.
4. The Teaching and Learning Unit is responsible for assuring the quality of courses taught by other departments.
5. Regular revising of course contents and specifications is documented by course reports.
6. Student's feedback by student course evaluations is taking into consideration.
7. Action plans (if required) is conducted to improve these courses.

3. Procedures Used to Ensure the Consistency between Main Campus and Branches (including male and female sections).

The program implements procedures to ensure of consistency between male and female sections such as:

1- Program and course specifications are identical in both sections and are implemented equally.
2- Teaching strategies and assessment methods are identical in both sections.
3- Learning resources are identical in both sections. And in case if it is not available, the female students have access to all learning resources in the main campus (male section).
4- All faculty members in both sections fairly participate in units and committees in department and college levels.
5- All services offered by the program are fairly implemented in both sections.
6- All faculty members and students in both sections fairly participate in community service activities.
7- All faculty members in both sections fairly participate in teaching courses.
8- All students in both sections fairly participate in the Student Advisory Council.

9- All students in both sections fairly participate in activities prepared by the College's Student Activities Unit and the Pharmacy Student Club.

4. Assessment Plan for Program Learning Outcomes (PLOs),

Program ILOs assessment is used to determine how well the program prepares students to achieve the learning outcomes. It is a collaborative process of inquiry regarding student learning outcomes, followed by analysis, reflection and actions (if needed). The results are used to detect strengths and weaknesses in students' performance in the learning domains and accordingly generate action plans in order to improve overall student achievement and to improve the program as a whole on the basis of actual evidence and measurable indicators.

Objectives:
1. To determine how well the program prepares students to achieve learning outcomes.
2. To detect strengths and weaknesses in students' performance in learning domains.
3. To generate action plans to improve overall student achievement and to improve the program as a whole on the basis of actual evidence and measurable indicators.
4. To identify issues and concerns that need attention and thus guide professional development.
5. To support accreditation and meet reporting requirements set by NCAAA.

Assessment methods:

A summative evaluation of 18 advanced courses for students who completed the program is conducted each academic year to review overall learning outcomes. These courses were selected carefully from the higher levels of the study plan in which students must master the learning outcomes assigned to these courses. These courses covered all the program learning outcomes. Program Learning Outcomes (PLOs) assessment in the program includes both direct and indirect methods. As Course Learning Outcomes (CLOs) are used as a direct assessment, the exit survey and interviews with the stakeholders are used as indirect methods for PLOs. The results should be used for continuous improvement during the assessment cycle of PLOs, which extends for 5 years. The assessment methods used for the assessment of PLOs and the uses of their results in the improvement process are shown in Table 1. The assessment cycle of program learning outcomes extends for 5 academic years during which all the PLOs will be assessed, and continuous improvement actions and minor changes are implemented while plans for implementing the required major changes "if any" will be designed by the end of the assessment cycle.

Assessment methods	
Direct (Using CLOs) **Summative (Cycle-based)**	**Indirect**
Average of related CLOs contributing to the achievement of the PLOs at the M- level as mentioned in the PLOs matrix	1. Course evaluation survey 2. Alumni survey 3. Stakeholders survey 4. Student exit survey 5. Interviews 6. Focus group discussion
The results are used for continuous improvement at the courses level during the assessment cycle, while the major changes at the program level are implemented at the end of the assessment cycle	
The program determines the data collection timeline and evaluation timeline as well as the timeline for implementing the required improvement for each PLO	

Table 1. Assessment methods used for assessment of PLOs.

5. Program Evaluation Matrix

Evaluation Areas/Aspects	Evaluation Sources/References	Evaluation Methods	Evaluation Time
Leadership	Program members	Surveys	End of the year
Effectiveness of teaching and assessment	Students, Graduates, alumni	Surveys	End of the year
Learning resources	1. Final year student 2. Responsible committee at the program level	Surveys Checklist	Beginning of the year
Quality of learning experience	Final year students	Surveys	End of academic year
Employers' evaluation of program graduate's proficiency	Employers	Surveys	End of academic year
Scientific activity of staff member	1. Percentage of program members who published at least one research during the year to total members in the program 2. Total number of published research to the total number of the faculty members during the year	Direct calculations	End of academic year

Evaluation Areas/Aspects: e.g., leadership, effectiveness of teaching & assessment, learning resources, services, partnerships, etc.

Evaluation Sources: students, graduates, alumni, faculty, program leaders, administrative staff, employers, independent reviewers, etc.

Evaluation Methods: e.g., Surveys, interviews, visits, etc.

Evaluation Time: e.g., beginning of semesters, end of the academic year, etc.

6. Program KPIs*

The period to achieve the target (5) year(s).

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
1	KPI-P-01	Students' Evaluation of quality of learning experience in the program	80%	Average of overall rating of final year students of the quality of learning experience in the program, satisfaction with the various services offered by the program, and satisfaction with adequacy and diversity of learning sources on a five-point scale in an annual survey	End of the semester
2	KPI-P-02	Students' evaluation of the quality of the courses	80%	Average students' overall rating for the quality of courses on a five-point scale in an annual survey	End of the semester
3	KPI-P-03	Completion rate	50%	Proportion of undergraduate students who completed the program in minimum time in each cohort	Every year
4	KPI-P-04	First-year students retention rate	90%	Percentage of first-year undergraduate students who continue at the program the next year to the total number of first-year students in the same year	Every year
5	KPI-P-05	Students' performance in the professional and/or national examinations	80%	Percentage of students or graduates who were successful in the professional and / or national examinations, or their score average and median (if any)	Every year
6	KPI-P-06	Graduates' employability and enrolment in postgraduate programs	80% 10%	Percentage of graduates from the program who within a year of graduation were: A. Employed within 12 months. B. Enrolled in postgraduate programs during the first year of their graduation to the total number of graduates in the same year.	One year after the graduation
7	KPI-P-07	Employers' evaluation of the program graduate's proficiency	80%	Average of the overall rating of employers for the proficiency of the program graduates on a five-point scale in an annual survey	Every year
8	KPI-P-08	Ratio of students to teaching staff	5:1	Ratio of the total number of students to the total number of full-time and full-time equivalent teaching staff in the program	Every year
9	KPI-P-09	Percentage of publications of faculty members	90%	Percentage of full-time faculty members who published at least one research paper during the year to total faculty members in the program	Every year
10	KPI-P-10	Rate of published research per faculty member	5:1	The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the year)	Every year
11	KPI-P-11	Citations rate in refereed journals per faculty member	120:1	The average number of citations in refereed journals from published research per each faculty member in the program (total number of citations in refereed journals from published research for full-time or equivalent	Every year

No.	KPIs Code	KPIs	Targeted Level	Measurement Methods	Measurement Time
				faculty members to the total research published	
12	KPI-PH-1	Number of community service activities performed by the program	5	Data collection form (Number of community programs, consultancy and community service activities in the academic year)	Every year
13	KPI-PH-2	Percentage of full-time teaching staff actively engaged in community service activities	60%	Data collection form (% of full time teaching staff actively engaged in community service activities in the academic year)	Every year

*including KPIs required by NCAAA

H. Specification Approval Data:

Council / Committee	**College Council**
Reference No.	**14460412-1044-00005**
Date	**16/10/2024**