

Ministry of Higher Education and Scientific Research
Scientific Supervision and Evaluation Authority
Quality Assurance and Academic Accreditation Department

Academic Program Description Form for Colleges and Institutes
For the Academic Year 2025-2026

University:

College/Institute: Al-Amal College of Specialized Medical Sciences

Scientific Department: Pharmacy

Date of Form Completion: 2025-2026

Signature:

Elsayed

Head of Department Name: prof Elsayed

Date: 2.5.2025

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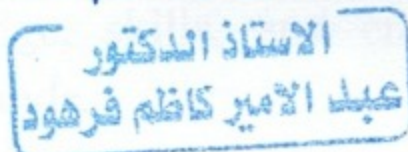
Signature:

A. K. Farhood

Scientific Dean's Assistant:

Date:

2/5/2026



Reviewed by:

Quality Assurance and University

Performance Division

Signature:

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Date:

2/5/2026

Abbas F. Hassoon

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Approval of the Dean

الاستاذ المساعد
د. ميفيد جميل جعفر

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1. Program Vision

Best Pharmacy Department in Iraq by 2030.

2. Program Mission

The College of Pharmacy is an educational and research institution of public benefit; its goal is human health. The college is keen to provide high-quality education and training using the latest methods and is multidisciplinary to prepare pharmacists and pharmaceutical scientists with high scientific and professional capabilities and skills to be leaders in their fields, capable of spreading health culture and providing the best healthcare in society and developing scientific research for the well-being of society and human health.

3. Program Objectives

- Provide the highest levels of knowledge, skills, and encouragement to college students using the latest educational methods.
- Prepare qualified pharmacists and pharmaceutical scientists to work in health institutions, community pharmacies, pharmaceutical laboratories, pathological analysis laboratories, pharmaceutical factories, in addition to pharmaceutical marketing companies.
- Develop the role of the pharmacist as a vital and effective part of the healthcare team.
- Improve the quality of education, scientific research, and pharmaceutical practice to achieve the best international standards.
- We strive for college to be distinguished among colleges in the region and the world.
- Actively contributes to spreading health awareness and culture in society.

4. Other External Influences

Ministry of Higher Education and Scientific Research

5. Program Structure				
Program Structure	Number of Courses	Credit Hours	Percentage	Notes*
Institution Requirements	/	/	/	/
College Requirements	5	9	100%	/
Department Requirements	54	169	94.4%	Core
Summer Training				Fulfilled
Other	/	/	/	/

* Notes may include whether the course is core or elective.

6. Program Description (Course List by Stage)					
Stage	Semester	Course Name	Course Code	Theoretical Hours	Practical Hours
First Stage	First	Biology	101 ClHb	2	2
		Principles of Pharmacy Practice	102 PPpp	2	---
		Analytical Chemistry	103 PcAc	3	2
		Medical Terminology	104 PtMt	1	---
		Biomathematics and Statistics	105 CIMb	3	---
		Human Rights & Democracy	113 ClHr	1	---
	Second	Human Anatomy	108 ClHa	1	2
		Pharmaceutical Calculations	109 PPhc	2	2
		Medical Physics	110 ClMp	2	2
		Organic Chemistry I	111 PcOc1	3	2
		Histology	112 ClHi	2	2
		Computer Science	114 ClCs	1	2
Second Stage	First	Organic Chemistry II	216 PcOc2	2	2
		Microbiology I	217 ClMm	3	2
		Biopharmaceutics I	218 PPp1	3	2
		Physiology I	219 Ptph1	3	2

		Computer Science	221 ClCs	---	2
		Ba'ath Party Crimes	---	1	---
	Second	Organic Chemistry III	223 PcOc3	2	2
		Microbiology II	224 ClMm	3	2
		Biopharmaceutics II	225 PPp2	3	2
		Physiology II	226 PtPh2	3	2
		Pharmacognosy & Medicinal Plants I	227 phpa1	3	2
		Computer Science	228 ClCs	---	2
		Arabic Language	223 PcAL3	2	---
Third Stage	First	Inorganic Pharmaceutical Chemistry	331 phIP2	2	2
		Pharmacognosy & Medicinal Plants II	332 PPY2	2	2
		Pharmaceutical Technology I	333 CIPT1	3	2
		Biochemistry I	334 ClPy1	3	2
		Physiopathology	235 ClEY	3	2
	Second	Organic Pharmaceutical Chemistry I	450 PtPc3	3	2
		Pharmacology I	451 PcOp3	3	---
		Pharmaceutical Technology II	452 CpCp2	3	2
		Biochemistry II	453 PtGt	3	2
		Pharmacognosy & Medicinal Plants III	454 Plp1	2	2

		Pharmacy Ethics	455 CpCs	1	---
Fourth Stage	First	Pharmacology II	450 PtPc3	3	2
		Organic Pharmaceutical Chemistry II	445 PcOp2	3	2
		Clinical Pharmacy I	446 CpCp1	2	2
		Biopharmacy	447 PBp	2	2
		Public Health	448 ClPu	2	---
	Second	Pharmacology III	450 PtPc3	2	---
		Organic Pharmaceutical Chemistry III	451 PcOp3	3	2
		Clinical Pharmacy II	452 CpCp2	2	2
		General Toxicology	453 PtGt	2	2
		Industrial Pharmacy I	454 Plp1	3	2
		Communication Skills	455 CpCs	2	---
Fifth Stage	First	Organic Pharmaceutical Chemistry IV	557 PcOp4	2	---
		Industrial Pharmacy II	558 Plp2	3	2
		Applied Therapeutics I	559 CpAt1	3	---
		Clinical Chemistry	560 ClCc	3	2
		Clinical Lab Training	561 ClCL	---	4
		Clinical Toxicology	562 PtCt	2	2
		Graduation Project	563 Pr	1	---
	Second	Pharmacoeconomics	563 GP	2	---
		Applied Therapeutics II	565 CpAt2	2	---
		Drug Monitoring	566 CpTd	2	2
		Advanced Pharmaceutical	567 PcAp	3	2

		Analysis			
		Hospital Training	568 CpHt	---	4
		Dosage Form Design	569 PDf	2	---
		Pharmaceutical Biotechnology	570 PPb	1	---

7. Program Learning Outcomes

A. Knowledge

1	Identify the natural functions of the body and the changes in these functions associated with disease.	Recognize the human body, its organs, and their functions in health and disease from anatomical, physiological, and biochemical perspectives.
2	Recognize the drug as a chemical compound and its chemical and physical properties.	Determine how the properties of a drug affect its efficacy and side effects.
3	Identify the types of pharmaceutical dosage forms.	Know how to determine the appropriate pharmaceutical dosage form, methods of manufacturing, and evaluation in terms of efficacy, therapeutic effect, adverse effects, stability, and calculation of correct doses.
4	Recognize different treatments.	Select the appropriate treatment for the disease condition and the required therapeutic effect.
5	Recognize medical statistics and medical physics.	Know the basics of evaluating the results of clinical studies and economic studies of pharmaceutical preparations.
6	Recognize the mechanism of drug action, side effects, and toxicity.	Identify drug interventions.

B. Skills

1	Deal with the laboratory environment safely.	The student can safely handle laboratory equipment and materials while observing laboratory safety and security standards.
2	Provide the highest level of healthcare.	The pharmacist can provide scientific and pharmaceutical consultations to individuals in healthcare institutions and the community, and follow up on treatment.
3	Provide safe and effective treatment.	The pharmacist can diagnose medication errors in terms of the appropriateness of the treatment for the disease condition and the patient, the absence of drug interactions or interactions with the patient's general health condition.

4	Monitor the safety and efficacy of treatment provided to the patient.	The pharmacist can apply the basic concepts of drug chemistry and mechanism of action in interpreting drug interactions and providing pharmaceutical consultation to medical staff and the community.
5	Skill in handling and dispensing medications.	The pharmacist can play a role in educating the patient about the use of different drug dosages and how to store the medicine.
6	Skill in preparing pharmaceutical preparations, compounds, and storage methods.	The pharmacist can prepare pharmaceutical compounds as needed and work in the field of pharmaceutical industry.

C. Values		
1	Deal with the patient according to the ethics of the pharmacy profession.	The pharmacist maintains patient confidentiality and makes patient and community safety the primary goal of the pharmacy profession.
2	Work as a team member with other colleagues within the healthcare team in the work environment.	The student and pharmacist interact with their colleagues in study and work with a team spirit within the healthcare team.
3	Recognize the concepts of human rights and citizenship.	The pharmacist should be aware of their duties and rights as a good citizen in society.
4	Communicate with the patient.	The pharmacist can deal with patients of various intellectual, educational, social, psychological, and health levels.
5	Communicate with medical staff.	The pharmacist can communicate with different medical staff (physicians, nurses, and others) to correct medication errors if found and provide evidence-based therapeutic recommendations.
6	Self-learning and research skills.	The student can search for information and utilize it effectively (Self-learning).

8. Teaching and Learning Strategies	
1	Lectures and presentations
2	Interactive discussions
3	Brainstorming

4	Small groups
5	Research and investigation
6	Flipped classrooms
7	Discussion circles / Seminars

9. Assessment Method	
1	Individual and group assignments and reports
2	Daily and weekly exams
3	Practical skills assessment
4	Midterm and final exams
5	Graduation projects

10. Teaching Staff					
A. Faculty members					
Academic Rank	Full-time	Part-time (Lecturer)	Total	General Specialty	Specific Specialty
Professor	2	0	2	1	1
Assistant Professor	2	1	3	1	2
Lecturer (PhD)	8	2	10	7	3
Assistant Lecturer (MSc)	21	0	21	17	4

B. Professional Development

I. Orientation for New Faculty Members

- Teaching Methods Course
- Teaching Qualification Course

II. Professional Development for Faculty Members

- Development Activity (English)
- Workshops, seminars, and courses on mechanisms and strategies of pharmaceutical education
- Fundamentals of writing exam questions
- Interactive teaching strategies
- Fundamentals and mechanisms for curriculum updating and development

11. Admission Criteria

- Academic average and physical health according to the regulations approved by the Ministry of Higher Education and Scientific Research

12. Key Information Sources about the Program

- College website and specialized scientific journals
- Ministry of Higher Education and Scientific Research website
- Signs displayed in the college corridors
- Official documentation
- Scientific references specific to each department

13. Program Development Plan

1	Adopting the Objective Structured Clinical Examination (OSCE) for the largest possible number of suitable courses and for all stages
2	Incorporating interactive teaching strategies
3	Increasing the use of technology in education
4	Encouraging scientific research and investigation
5	Developing practical skills
6	Encouraging interdisciplinary collaboration and professional development for the teaching staff

[illegible]

[illegible]

Third Stage	Program Skills Matrix												
	Program Learning Outcomes												
	Course Name	Cognitive Objectives				Skills Objectives				Values Objectives			
		A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
	Inorganic Pharmaceutical Chemistry		√			√	√				√		
	Pharmacognosy and Medicinal Plants II	√				√	√	√	√	√			
	Pharmaceutical Technology I			√		√	√	√		√	√		
	Biochemistry I	√				√	√	√			√		
	Physiopathology	√				√	√				√		
	Organic Pharmaceutical Chemistry I		√			√	√				√		
	Pharmacology I			√	√					√	√		
	Pharmaceutical Technology II			√		√	√	√		√	√		
	Biochemistry II	√				√	√	√			√		
	Pharmacognosy and Medicinal Plants III		√			√	√	√	√	√			
	Pharmacy Ethics									√	√		

Fourth Stage	Program Skills Matrix												
	Program Learning Outcomes												
	Course Name	Cognitive Objectives				Skills Objectives				Values Objectives			
		A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
	Pharmacology II		√	√		√			√	√	√		
	Organic Pharmaceutical Chemistry II		√			√	√				√		
	Clinical Pharmacy I	√			√			√	√	√	√		
	Biopharmacy	√		√		√	√		√		√		
	Public Health	√			√			√		√	√		
	Pharmacology III		√	√						√	√		
	Organic Pharmaceutical Chemistry III		√			√	√				√		
	Clinical Pharmacy II	√			√		√	√	√	√	√		
	General Toxicology		√		√	√	√		√	√	√		
	Industrial Pharmacy I		√	√		√	√				√		
	Communication Skills									√	√		

