

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus #  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department#**



# **Academic Program and Course Description Guide**

**2025**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## Concepts and terminology:

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## **Academic Program Description Form**

**University Name:** Al-Farabi university

**Faculty/Institute:** Pharmacy college

**Scientific Department:** .NON

**Academic or Professional Program Name:** Bachelor of pharmacy

**Final Certificate Name:** Bachelor of pharmacy

**Academic System:** Seasonal

**Description Preparation Date:**

**File Completion Date:**

**Signature:**

**Head of Department Name:**

**Date:**

**Signature:**

**Scientific Associate Name:**

**Date:**

**The file is checked by:**

**Department of Quality Assurance and University Performance**

**Director of the Quality Assurance and University Performance Department:**

**Date:**

**Signature:**

**Approval of the Dean**

### **1. Program Vision**

Program vision is written here as stated in the university's catalogue and website.

### **2. Program Mission**

To prepare pharmacists and pharmaceutical scientists who have high scientific and professional abilities and skills to be leaders In their specializations, they are able to spread health culture.

### **3. Program Objectives**

The college is keen to provide high-quality, multi-specialized education and training using the latest means to graduate dependable pharmacist that can serve their society.

### **4. Program Accreditation**

NON

### **5. Other external influences**

College of pharmacy

University of al-mustansiriya

## 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	12	17	12%	
College Requirements	17	56	38%	
Department Requirements	33	73	50%	
Summer Training	2			
Other				

\* This can include notes whether the course is basic or optional.

## 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
First year Course One			theoretical	practical
		Human biology	2	2
		Principles of Pharmacy Practice	2	----
		Analytical Chemistry	3	2
		Medical Terminology	1	----
		Mathematics and Biostatistics	3	----
		Computer Sciences	----	2
		English Language	2	----
		Democracy and Human Rights	2	----
First year Course two		Human Anatomy	1	2
		Pharmaceutical Calculations	2	2
		Medical Physics	2	2
		Organic Chemistry I	3	2
		Histology	2	2
		Computer Sciences	----	2
Second year Course One		Organic Chemistry II	3	2
		Medical Microbiology I	3	2
		Physical Pharmacy I	3	2

		Physiology I	3	2
		Democracy	1	---
		Computer Sciences	----	2
		Crimes of Ba'ath Regime in Iraq	2	----
<b>second year Course Two</b>		Organic Chemistry III	2	2
		Medical Microbiology II	3	2
		Physical Pharmacy II	3	2
		Physiology II	3	2
		Pharmacognosy I	3	2
		Computer Sciences	----	2
		Arabic Language	2	-----
<b>Third year Course one</b>		Inorganic Pharmaceutical Chemistry	2	2
		Pharmacognosy II	2	2
		Pharmaceutical Technology I	3	2
		Biochemistry I	3	2
		Pathophysiology	3	2
<b>Third year Course two</b>		Organic Pharm. Chemistry I	3	2
		Pharmacology I	3	----
		Pharm. Technology II	3	2
		Biochemistry II	3	2
		Pharmacognosy III	2	2
		Pharmacy Ethics	1	----
<b>Fourth year Course one</b>		Pharmacology II	3	2
		Organic Pharm. Chemistry II	3	2
		Clinical Pharmacy I	2	2
		Biopharmaceutics	2	2
		Public Health	2	----
		English Language	1	----
<b>Fourth stage course Two</b>		Pharmacology III	2	----
		Organic Pharm. Chemistry III	3	2
		Clinical Pharmacy II	2	2
		General Toxicology	2	2
		Industrial Pharmacy I	3	2

		Communication Skills	2	----
		English Language	1	----
<b>Fifth stage Course I</b>		Organic Pharm. Chemistry IV	2	----
		Industrial Pharmacy II	3	2
		Applied Therapeutics- I	3	-----
		Clinical Chemistry	3	2
		Clinical Laboratory Training	----	4
		Clinical Toxicology	2	2
		Graduation project	1	----
<b>Fifth stage course Two</b>		Pharmacoeconomic	2	----
		Applied Therapeutics- II	2	----
		Therapeutic Drug Monitoring (TDM)	2	2
		Advanced Pharmaceutical Analysis	3	2
		Hospital Training	----	4
		Dosage Form Design	2	----
		Pharmaceutical Biotechnology	1	----



## 8. Expected learning outcomes of the program

### Knowledge

#### Learning Outcomes 1

- 1 Recognizing the normal functions of the body and the changes in these functions that accompany the disease
2. Identifying the drug as a chemical compound and the consequences of its properties in terms of the drug's effectiveness and its chemical nature, its action, methods of formulation, and side effects.
3. Identify the types of medicinal dosages and how to determine the appropriate medicinal formula for the medication, and methods for classifying it. It was examined and evaluated in terms of effectiveness, therapeutic effect, calculate the correct doses and stability.
4. Learn about the different treatments and how to choose the appropriate treatment according to the disease condition.
5. Getting to know the concepts of human rights and citizenship.
6. Learn about the principles of medical statistics and medical physics.

### Skills

#### Learning Outcomes 2

- 1 The student acquires the skill of dealing with laboratory equipment
2. The student acquires the skill of self-learning.
3. The pharmacist can provide the highest level of health care to patients, whether in health institutions or Life and community
4. The pharmacist must be able to diagnose medicinal errors in terms of the appropriateness of the treatment for the condition, beside their abilities to find out drug interactions or interactions with the patient's general health condition.
5. The pharmacist is able to deal with patients of various intellectual, scientific and social levels.
6. The pharmacist can communicate with various medical personnel, such as the doctor, nurse, and others, to rectify treatment errors, if any, and provide treatment recommendations based on sound foundations.
7. The pharmacist is able to apply the basic concepts of drug chemistry and its mechanism of action in interpreting the interventions the pharmaceutical intervention and providing pharmaceutical consultation to medical staff and the community.

	8. The pharmacist is able to play the role of teaching the patient about the aspects of using the medicinal dose and how to store the medicine.
<b>Ethics</b>	
Learning Outcomes 4	1 Dealing with patients according to the ethics of the pharmacy profession 2. Putting the safety and security of the patient as the first priority. 3. Dealing in a team spirit with other colleagues within the health care team.

## 9. Teaching and Learning Strategies

- Presentation and delivery
- Interactive discussions
- Brainstorming
- Small groups
- Research and induction
- Panel discussions
- Field visits to institutions and entities related to the pharmacist's work

## 10. Evaluation methods

- Individual and group duties and reports
- Daily exams
- Assess practical skills
- Mid-semester and end-of-semester exams
- Graduation projects

## 11. Faculty

### Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
	Pharmacy	Pharmacology			1	4
	Pharmacy	Toxicology			1	4
	Pharmacy	Pharmaceuticals			1	3
	Pharmacy	Pharmacognosy			1	2
	Pharmacy	Chemistry			1	5
	Medical	Terminology			0	1
	Clinical	Clinical pharmacy				2
	Language	Arabic Englsih				4
	Science	Computer science				2

### Professional Development

#### Mentoring new faculty members

The mentor (usually PhD.) make a field visit with the new members whether to the laboratory or to the teaching halls to make them familiar with equipment's and facilities beside one to one sessions include briefing of the curriculum topics and the main assessing ways of our students.

#### Professional development of faculty members

The academic program includes workshops, seminars, and discussion panels that focus on aspects of general societal behavior and educational behavior in a general way.

The academic program includes special seminars in which members present cutting age scientific topics.

<b>12. Acceptance Criterion</b>
Academic grade point average and physical health as reported by the Ministry of Higher Education and Scientific Research

<b>13. The most important sources of information about the program</b>
The website of the Department of Pharmacy, Al-Farabi University College, in Arabic and English. Al-Farabi University College website The website of the Ministry of Higher Education and Scientific Research The page of the Department of Pharmacy, Al-Farabi University College, on social networking sites Plates installed in the department's corridors

<b>14. Program Development Plan</b>
To analyze existing programs, based on quantitative and qualitative indicators, relative to their competitive strength and position in the marketplace.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First year		Human biology				\		\		\		\	\		
		Principle of pharmacy				\		\		\		\	\		
		Analytical chemistry				\		\			\		\		
		Medical teminology				\		\			\		\		
		Mathmatics and biostatistics				\	\	\			\		\	\	
		Computer sciences				\	\	\			\		\	\	
		English				\	\	\			\		\		
		Anatomy				\		\			\		\		
		Pharmaceuti cal calculations			\	\		\			\		\	\	
		Medical physics			\	\	\	\			\		\		\

		Organics chemistry I			\			\	\	\			\		
		Hisology		\				\	\				\		
		Human rights					\	\	\		\	\	\	\	\
		Computer science II					\	\	\			\			
Second stage		Organics chemistry II			\			\	\	\			\		
		Microbiology I		\			\	\	\			\			
		Physical pharmacy I			\	\		\	\	\	\		\		\
		Physiology I		\				\	\			\			
		Democracy					\	\	\		\	\			
		Computer science III					\	\	\			\			
		Biosafety and security			\		\	\	\			\	\	\	
		Organic chemisrty III			\		\	\	\			\			
		Microbiology II		\			\	\	\	\		\	\		
		Physical pharmacy II			\	\		\	\	\		\			
		Physiology II			\	\		\	\	\		\			

		Pharmacognosy I			\			\	\	\	\		\		
		Computer science IV					\		\	\			\		
Third stage		Inorganic pharmaceutical chemistry			\			\	\	\			\		
		Pharmacognosy II			\				\	\			\		
		Pharmaceutical technology I				\		\	\	\		\	\	\	
		Biochemistry I		\				\	\	\			\		
		Pathophysiology		\				\	\	\			\		
		English V							\	\			\		\
		Organic chemistry I			\			\	\	\			\		
		Pharmacology I			\		\	\	\	\			\		\
		Pharmaceutical technology II				\			\	\		\	\		
		Biochemistry II		\				\	\	\			\	\	

		Pharmacognosy III			\			\	\	\				\	
		Ethics					\		\	\		\	\	\	\
Fourth stage		Pharmacology II			\		\		\	\		\			
		Clinical pharmacy I					\	\	\	\	\			\	
		Organic chemistry II			\			\	\	\		\	\		
		Biopharmaceutics				\		\	\	\		\	\	\	
		Public health			\	\			\	\			\		
		Pharmacology III			\		\		\	\		\	\		
		Organic pharmaceutical chemistry III			\			\	\	\			\		
		Clinical pharmacy II					\		\	\	\		\	\	\
		General toxicology			\		\		\	\		\	\		
		Industrial pharmacy I													
		Communication skills					\		\	\			\	\	



<b>Fifth stage</b>		<b>Organic pharmaceuti cal chemistry IV</b>			\			\	\	\			\		
		<b>Applied therapeutics</b>					\	\	\	\			\		\
		<b>Industrial pharmacy</b>			\	\		\	\				\		
		<b>Clinical chemistry</b>		\					\	\			\		
		<b>Clinical laboratory training</b>		\					\	\		\	\	\	\
		<b>Clinical toxicology</b>			\		\		\	\			\		
		<b>Drug economy</b>					\		\	\			\		
		<b>Applied therapeutics II</b>					\		\	\	\		\	\	
		<b>Drug therapeutics monitoring</b>				\			\	\	\		\	\	\
		<b>Advanced pharmaceuti cal analysis</b>			\			\	\	\			\	\	
		<b>Hospital training</b>					\		\	\			\		

		<b>Dosage form design</b>			\	\			\	\			\		
		<b>Pharmaceutical biotechnology</b>			\	\			\	\			\		