

**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 Syllabus Description Guide Pharmaceuticals**

**2024**

## **Academic Program Description Form**

**University Name: University of Kirkuk**  
**Faculty/Institute: College of Pharmacy**  
**Scientific Department: Pharmaceuticals**  
**File Completion Date: 21/3/2024**

**Signature:**  
**Head of Department:**  
**Asst. Prof. Nihad Taha Ismael**  
**Date: 3/4/2024**

**Signature:**  
**Scientific Associate:**  
**Asst. Prof. Muhsin Hamid Edham**  
**Date:4/4/2024**

**The file is checked by:**  
**Department of Quality Assurance and University Performance**  
**Director of the Quality Assurance and University Performance Department:**  
**Sarah Mohammed Najeeb**  
**Date: 4/4/2024**  
**Signature:**

**Approval of the Dean**

## **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.

### **1. Program Vision**

The program aims at graduating groups of students with full knowledge of the history of Pharmacy and the ethics to be possessed by the pharmacist. In addition, the pharmacists must be fully aware and familiar with the pharmacological doses available in the pharmacy market and how to make such doses.

### **2. Program Mission**

A fully detailed description of the materials and skills that students acquire and learn in the University of Kirkuk, College of Pharmacy.

### **3. Program Objectives**

- The study of the history and basics of pharmacy.
- The study and instructions of size and weight measurements.
- The study of the basics of drugs compounding.
- The study of physics, chemical and mathematical basics concerning all the chemical and physical phenomena of the materials in its solid, liquid and gas state.
- The study of the basics of drugs compounding such as syrups, pills, lotion and other pharmaceutical compounding and the ways of preparing, stability and packing.
- Get acquainted with the ethics and laws of pharmacy profession practice.
- Define, label, and categorize the medicinal plants and the techniques to extract active materials pharmacologically and the methods to separate and purify such materials in addition to the thorough study of all active chemical groups and their locations in the plants and their effect and the medicine contained by such groups.
- The student studies the full pharmaceutical manufacturing of different

pharmaceuticals doses.

- The study of dosage designs of different forms and methods to be delivered inside the body.
- The study of medications absorption of different kinds and dosages in addition to the mechanism of absorption and their excretions in addition to the study of the importance of dosages related to hormones and proteins and the ways of sterilizing and preserving.

#### 4. Program Accreditation

Quality Assurance – University of Kirkuk

#### 5. Other external influences

Ministry of Higher Education and Scientific Research

#### 6. Program Structure

Program Structure	Number of syllabuses	Credit hours	Percentage	Reviews*
Institution Requirements				
College Requirements				
Department Requirements	15	42	20%	Mandatory
Summer Training				
Other				

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

#### 7. Program Description

Year/Level	Syllabus Code	Syllabus Name	Credit Hours	
			theoretical	practical
First Year		Pharmacy Practice	2	---

		<b>Principle</b>		
		<b>Pharmaceutical Calculations</b>	<b>2</b>	<b>1</b>
<b>Second Year</b>		<b>Physical Pharmacy 1</b>	<b>2</b>	<b>2</b>
		<b>Physical Pharmacy 2</b>	<b>2</b>	<b>2</b>
		<b>Pharmacology and</b>	<b>2</b>	<b>2</b>
<b>Third Year</b>		<b>Pharmacology and</b>	<b>2</b>	<b>1</b>
		<b>Pharmaceutical Technology 1</b>	<b>2</b>	<b>2</b>
		<b>Pharmaceutical Technology 2</b>	<b>2</b>	<b>2</b>
		<b>Pharmacology and</b>	<b>2</b>	<b>2</b>
		<b>Pharmacy Ethics</b>	<b>1</b>	<b>---</b>
<b>Fourth Year</b>		<b>Bio-pharmacy</b>	<b>2</b>	<b>2</b>
		<b>Industrial Pharmacy1</b>	<b>3</b>	<b>1</b>
<b>Fifth Year</b>		<b>Industrial Pharmacy2</b>	<b>3</b>	<b>1</b>
		<b>Dosage Design</b>	<b>2</b>	<b>---</b>
		<b>Viral Pharmaceutical Technology</b>	<b>1</b>	<b>---</b>

## 8. Expected learning outcomes of the program

### Knowledge

Pharmacy general principles study

1. Knowledge of medications of all kinds and forms.
2. Methods of preparing active materials as full dosages for animals and how to apply such dosages on human being.
3. Study of different kinds of prepared dosages stability.
4. Knowledge of types of medical

	plants and the ways of scientific classification.
<b>Skills</b>	
Gain skill of handling patients in the pharmacy business.	<ol style="list-style-type: none"> <li>1. Gain skills in preparing and composing pharmaceutical compositions.</li> <li>2. Discover the period of stability of medications and pharmaceutical compositions and the different methods of preservation of active materials.</li> <li>3. Study of medical plants identifying methods.</li> <li>4. The capability of graduates to use new medical devices.</li> <li>5. The ability of graduates to train technicians in the field of pharmacy.</li> <li>6. Design and create new medications.</li> </ol>
Learn different sources of medication manufacturing.	<ol style="list-style-type: none"> <li>1. The study of positive and negative effects of medical plants.</li> <li>2. Train on latest devices in medication manufacturing.</li> <li>3. Discover latest systems of providing medication.</li> </ol>
<b>Ethics</b>	
Developing future thoughts and plans for pharmacy market requirements.	<ol style="list-style-type: none"> <li>1. Providing scientific projects.</li> <li>2. Identifying pharmacy profession law regulations.</li> <li>3. Group talks to improve team-work skills.</li> </ol>

## 9. Teaching and Learning Strategies

Provide lectures, class discussions, seminars and request researches and from students.



## 10. Evaluation methods

1. Shorts oral or paper exams.
2. Home-works.
3. Daily reports of scientific experiments.
4. Mid-term exams.
5. Final course exams.

## 11. Faculty

### Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Asst. Prof.	Chemistry	Bio Chemistry	Head of Department		/	
Asst. Lect.	Pharmacy	Clinical Pharmacy	Rapporteur		/	
Asst. Lect.	Chemistry	Analytical Chemistry	Exam Committee Member		/	
Asst. Lect.	Biology	Microbiology	Head of Students' Activity Department		/	
Asst. Lect.	Pharmacy	Pharmacology			/	
Asst. Lect.	Pharmacy	Medical Drugs			/	

## **Professional Development**

### **Mentoring new faculty members**

Conduct Identification seminar about the specialty of each new faculty member and about the thesis and skills obtained and gained through-out his/her study.

### **Professional development of faculty members**

Conduct sessions about the modern scientific research, statistics, and teaching skills.

## **12. Acceptance Criterion**

In accordance with the instructions of the Ministry of Higher Education and Scientific Research in Iraq, scientific stream / biological

## **13. The most important sources of information about the program**

Accredited internet websites, books and researches related to the syllabus.

## **14. Program Development Plan**

Scientific pursuit and continuous search of latest syllabuses to be included into the syllabus to keep-up with the development.

