

**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**

**2024–2025**

## **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: .Ibn Sina University for Medical and Pharmaceutical Sciences**

**Faculty/Institute:** ....College of Dentistry.....  
**Scientific Department:** ....department of basic sciences.....  
**Academic or Professional Program Name:** Bachelor of Dentistry.....  
**Final Certificate Name:** .... Bachelor of Dentistry.....  
**Academic System:** ...Annual.....  
**Description Preparation Date:** 15/8/2024  
**File Completion Date:** 24/11/2024

**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**

<b>1. Program Vision</b>

## 2. Program Mission

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## 3. Program Objectives

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## 4. Program Accreditation

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## 5. Other external influences

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## 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	120	120		Basic course
College Requirements				
Department Requirements				
Summer Training				
Other				

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

## 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
Third class/		pharmacology	theoretical	practical

2024–2025				

## 8. Expected learning outcomes of the program

### Knowledge

#### Cognitive objectives that the student will acquire:

Convey a level of information that forms the basic foundation for drug therapy in medical practice in the future so that the student will be able at the end of the curriculum to:

- Understand the mechanism of action of the drug at the molecular and cellular level, including the beneficial and harmful effects of the drug.
- Understand the kinetics of the drug inside the body, including absorption, distribution, metabolism and excretion, and the ability to apply this during medical treatment.
- Introduce the student to the fact that drugs can affect all body systems and to have the ability to classify these drugs according to their effect on the body systems for practical purposes.
- Know at least one drug that represents each drug group, especially drugs of practical importance.
- Develop the student's ability to describe drug groups, especially the basic ones that are used in medical treatment, and to be trained in a way that qualifies him to obtain information about any other drugs, including new ones, through self-education.
- Know the serious side effects and contraindications for each drug that represents the group.
- Identify the basic principles of acute drug poisoning and other problems related to drugs such as addiction and misuse.

### Skills

#### The skill objectives that the student will acquire:

- The skill of writing medical prescriptions correctly for patients.
- The ethics and skill of dealing with patients in critical medical cases that require the use of emergency medications.
- The skill of correct use and how to deal with various pharmaceutical chemicals and medical materials used for devices and patients in dental clinics.

### Ethics

#### Emotional and value-based objectives:

- Good interaction of students with each other.
- Developing a spirit of assistance.
- Eliminating class differences.
- Ethical and professional discipline that contributes to creating doctors who are characterized by professionalism, transparency, honesty and integrity in their dealings with their colleagues from the health cadres as well as with patients.

Evaluation methods (that achieve emotional and value-based objectives):

- Evaluating the student's performance during his interaction and dealing with his colleagues or with patients as part of the practical evaluation.
- Conducting various tests during the semester

## 9. Teaching and Learning Strategies

**Teaching methods (that achieve emotional and value goals):**

- Giving lectures, conducting discussions, and presenting seminars that address these topics in modern ways.
- Holding small scientific sessions to discuss how to deal optimally in a practical way.

**Learning methods (that achieve emotional and value goals):**

- Training visits to hospitals or primary health care centers so that the student can apply and practice the optimal professional dealing in a practical and actual way.

– **Electronic teaching and learning methods (that achieve skill goals):**

If it is required that theoretical lectures be electronic, this can be done by relying on many electronic platforms such as:

- Google Classroom
- Zoom
- Conference

## 10. Evaluation methods

**Evaluation methods (that achieve cognitive objectives):**

- Periodic tests.
- Student interaction in in-person lectures.



- Grades of various assignments.
- Reports.
- Grades of exams (practical + theoretical) and mid-term and final exams.

**Evaluation methods (that achieve skill objectives):**

- Student participation in classroom activities.
- Shared homework.
- Weekly exams.
- Semester exams.
- Writing reports.
- Giving seminars.
- Grades of theoretical and practical exams for mid-term and final exams

11. Faculty						
Faculty Members						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer

Professional Development
Mentoring new faculty members
Professional development of faculty members

**12. Acceptance Criterion**

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

Lippincott Illustrated Reviews: Pharmacology, 8<sup>th</sup> Edition (2012) - Karen Whalen.

**14. Program Development Plan**

- Adopting a study plan that takes into account the academic accreditation standards for the specialization.
- Seeking to update the curricula to keep pace with the development of curricula, rapid progress and rapid boom in science and scientific research.
- Programmed endeavor to reach the edges of science through communication with reputable universities and cultural exchange at the level of research, visits or cultural exchange to gain experience and theoretical knowledge of science.

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
2024-2025		pharmacology	basic												

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## Course Description Form

1. Course Name:	
pharmacology	
2. Course Code:	
3. Semester / Year:	
Annual /2024–2025	
4. Description Preparation Date:	
15/ 08/ 2024	
5. Available Attendance Forms:	
In-person/ Online (remote)/ Practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
120 hour / 4 hour per week	
7. Course administrator's name (mention all, if more than one name)	
Name: Assis. Prof. Dr. Mohammad Ayyed Najem Email:	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• Study the types of drugs used in the treatment of various diseases.</li> <li>• Study the disadvantages of drugs.</li> <li>• Study the cases in which the use of drugs is prohibited.</li> <li>• Study the effect of the drug on the body's systems.</li> <li>• Study the body's effect on the drug from absorption, metabolism and excretion.</li> <li>• Study drug interactions.</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<p>1- Cooperative concept planning education strategy. 2- Brainstorming education strategy. 3- Notes series education strategy</p>
10. Course Structure	

Evaluation method	Learning method	Practical part	Theoretical part	Hours	Weeks	الفصل الدراسي
Student attendance + weekly, semi-annual and annual exams	Theoretical lectures in classrooms + practical explanation in laboratories	Introduction and animal (e.g. rabbits) handling	Pharmacology: General concepts	4	1	1
		Routes of drug administration (Part 1)	Pharmacokinetics and pharmacodynamics	4	2	2
		Routes of drug administration (Part 2)	ANS (cholinergic agonist and antagonist)	4	3	3
		Clinical parameters in drug pharmacokinetics (Part 1)	Adrenergic agonists	4	4	4
		Clinical parameters in drug pharmacokinetics (Part 2)	Adrenergic antagonists	4	5	5
		Demonstration of common dosage forms used in clinical practice (part1)	Antihypertensive drugs	4	6	6
		Continue with above (Part 2)	Management of angina and heart failure	4	7	7
		Cholinergic agonists and antagonists (Physostigmine Vs Curare)	Management of arrhythmia	4	8	8
		Effects of Drugs on Human Blood Pressure (Part 1-B-Blockers)	Anticoagulants, antiplatelet and anti-hyperlipidemic drugs	4	9	9
		Effects of Drugs on Human Blood Pressure (Part 2) (Nitrates Effect on Human Volunteers)	Introduction the pharmacology of CNS drugs, sedative, hypnotics and antiseizures drugs	4	10	10
		Effects of Drugs on The Arterial Blood Pressure Of Human (Part-3)	Antipsychotic and antidepressant drugs	4	11	11
		The effects of drugs and light on human eyes	Local and general anesthetics	4	12	12
		The effects of drugs and light on human eyes	Drug of abuse and opioid analgesics	4	13	13
		Effects of parasympathomimetic drugs on glandular secretions	Managements of diabetes mellitus	4	14	14
		Human skin response to histamine and adrenaline	Drugs affecting GIT	4	15	15
Student attendance + weekly, semi-annual and annual exams	Theoretical lectures in classrooms + practical explanation in laboratories	The response of human skin to histamine and adrenaline	Drugs acting on respiratory system (antihistamines and corticosteroids)	4	16	16
		Evaluation of Analgesics	Non-steroidal anti-inflammatory drugs (NSAIDs) part 1	4	17	17
		Evaluation of analgesics (Opioids)	Non-steroidal anti-inflammatory drugs (NSAIDs) part2 and Steroids in Dentistry	4	18	18
		Evaluation of Anti-inflammatory Drugs	Chemotherapeutic drugs (Principles of antimicrobial therapy)	4	19	19
		Evaluation of Anti-inflammatory Drugs	Cell wall inhibitors (part1)	4	20	20
		Local Anesthesia	Cell wall inhibitors (part 2)	4	21	21
		General Anesthesia	Protein synthesis inhibitors	4	22	22
		General Anesthesia	Quinolones, Folic acid antagonists and antimycobacterial	4	23	23
		Prescription writing	Antifungal, antiviral and antiprotozoal drugs	4	24	24
		Prescription writing	Sex hormone and contraceptive	4	25	25
		Prescription writing	Thyroid hormones and anti-thyroid drugs	4	26	26
		Oral conditions and their treatment	Anticancer drugs	4	27	27
		Oro dental preparation (part 1)	Dental Pharmacology: drugs and chemicals used in dental clinic	4	28	28
		Oro dental preparation (part 2)	Anticaries and drugs used in prevention of dental plaque	4	29	29
		Dental health and endocarditis prevention	Essential emergency drugs in dental clinic	4	30	30

## 11. Course Evaluation

Student participation in class activities.

- ☑ Shared homework.
- ☑ Weekly exams.
- ☑ Semester exams.
- ☑ Writing reports.
- ☑ Delivering seminars.
- ☑ Theoretical and practical exam scores for the middle and end of academic years.

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lippincott Illustrated Reviews: Pharmacology, (2022) - Karen Whalen.
Main references (sources)	<ul style="list-style-type: none"> <li>▪ Nature Reviews Drug Discovery Journal.</li> <li>▪ Pharmacological Reviews Journal.</li> <li>▪ Drug Resistance Updates Journal.</li> <li>▪ Annual Review of Pharmacology and Toxicology Journal.</li> <li>▪ Pain Journal.</li> <li>▪ British Journal of Pharmacology.</li> <li>▪ <u>Drug Discovery Today</u></li> <li>▪ Journal of Antimicrobial Chemotherapy</li> <li>▪ Pharmacological Reports Journal.</li> </ul>
Recommended books and references (scientific journals, reports...)	<ul style="list-style-type: none"> <li>▪ Pharmacology for Dentistry E-book, Tara V. Shanbhag, Smita Shenoy, Veena Nayak, 2021.</li> <li>▪ A Text-book of Dental Pathology and Therapeutics by Henry H. Burchard · 2016.</li> <li>▪ Goodman &amp; Gilman's Manual of Pharmacology Therapeutics by Randa Hilal-Dandan and Laurence Brunton Latest Edition.</li> <li>▪ British National Formulary (BNF 86).</li> </ul>
Electronic References, Websites	<ul style="list-style-type: none"> <li>▪ Medscape</li> <li>▪ DrugBank</li> <li>▪ Drugs.com:</li> <li>▪ Medicines A-Z:</li> <li>▪ Medicines Information – SPC &amp; PILS</li> <li>▪ RxList</li> </ul>

