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

University Name:	
Faculty/Institute:	
Scientific Department:	
Academic or Professional Program Name:	
Final Certificate Name:	
Academic System:	
<b>Description Preparation Date: 4/9/2024</b>	
File Completion Date: 4/9/2024	
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The file is checked by:  Department of Quality Assurance and University I  Director of the Quality Assurance and University I  Date:  Signature:	

Approval of the Dean Assist Prof.Dr.Maha Elttaif Jasim

# 1. Program Vision

The effort to secure and achieve educational, pedagogical, and humanitarian programs in order to enhance skills and build capacities of educational outputs in pharmaceutical education, training, and scientific research to develop the pharmaceutical services provided to the beneficiaries.

## 2. Program Mission

Preparing administrative and technical cadres to provide the best pharmaceutical services to the community through the quality of graduates in this specialization and ensuring professional and human dealing. Providing high–quality education and scientific research that meets the requirements of the era, supplying the labor market with highly competitive competencies, attracting distinguished scientific cadres, preserving heritage and national identity, and building strategic partnerships with the local community and all sectors, towards achieving advanced ranks in classification, teaching, research, and community service.

# 3. Program Objectives

Preparing qualified technical staff to work in the fields of clinical and pharmaceutical pharmacy under the supervision of a pharmacist, and in the field of pharmaceutical and chemical industries under the supervision of either a pharmacist or a chemist.

# 4. Program Accreditation

#### 5. Other external influences

There is a relationship between the medical department and the health sector through training, follow-up, and the presence of a sponsoring entity that contributes to:

- 1-Connecting the program to the labor market or community
- 2-Providing financial, logistical, or training support
- 3-Facilitating employment and practical training
- 4-Continuous guidance for the program.

6. Program Structure												
Program Structure	Number of Courses	Credit hours	Percentage	Reviews								
Institution Requirements	9	18	15.7%	Core curriculum								
College Requirements	5	14	12.2%	Essential and non- essential								
Department Requirements	25	82	71.9%	Essential and non-essential								
Summer Training				Satisfaction								
Other												

7. Program Description											
Year/Level	Course Code	Course Name	Credit Hours								
			theoretical	practical							
	NTU 100	Human Rights and Democratic	۲	•							
	NTU 101	English language	۲	•							
	NTU 102	Principles computer	١	١							
	NTU 104	Arabic	۲	•							
	NTU 105	Sport (optional)	١	١							
	NTU 106	French language (optional)	۲	•							
	TID 107	Physiology	۲	۲							
2024/2025	TID 108	Laboratory and workshop safety	۲	•							
Level one	TID 109	Medical Terminology	۲	•							
	TID 110	Anatomy	۲	۲							
	PHT 111	Principles Pharmacy	۲	۲							
	PHT 112	Basics of Organic chemistry	۲	۲							
	PHT 113	Analytical Chemistry	۲	۲							
	PHT 114	Pharmaceutical Calculation	۲	۲							
	PHT 115	Organic Chemistry	۲	۲							
	PHT 116	Microbiology	۲	۲							
	PHT 117	Biochemistry	۲	۲							

	PHT 118	(optional) First aid	۲	•
	PHT 119	Psychology (optional)	۲	•
	NTU 203	crimes of the Ba'ath regime in Iraq	۲	•
2024/2025	NTU 202	Arabic	۲	•
2024/2025 Level two	NTU 203	Professional Ethics	۲	•
26,61,110	TID 202	Statistics	۲	•
	PHT 203	Toxicology	۲	۲
	PHT 204	Industrial Principles	۲	۲
	PHT 205	Principle of pharmaceutical chemistry	۲	۲
	PHT 206	chemistry Principle of Drugs	7	۲
	PHT 207	Drugs Medicinal plants and natural products	١	۲
	PHT 208	products Basic of Applied therapeutic	١	۲
	PHT 209	therapeutic Toxicology	۲	•
	PHT 211	Pharmaceutical Formulation	۲	۲
	PHT 212	Industrial Pharmacy	۲	۲
	PHT 213	Pharmaceutical chemistry	۲	۲
	PHT 214	Pharmacology	۲	۲
	PHT 215	Therapeutics Application	١	۲
	PHT 216	pharmacognosy	1	۲
	PHT 210	Proposal	•	۲
	PHT 217	Community Health (optional)	١	•
	PHT 218	Commutation Skills (optional)	١	•

# 8. Expected learning outcomes of the program

# Knowledge

- 1-The student's ability to apply knowledge in medical fields in general and in the field of pharmacy in particular.
- 2-The student's knowledge of the principles and professional and ethical responsibilities in the field of specialization.

- 3-Knowledge of the pharmacological effects of different types of drugs and studying their effects and effectiveness within the body.
- 4- Enabling the student to assist the doctor in diagnostic and therapeutic procedures during the implementation of health programs.

#### **Skills**

- 1-Preparing students for work and integration into multidisciplinary teams.
- 2- Enabling students to acquire skills in the methods of assembling and preparing medications.
- 3- Qualifying students to use modern technologies and specialized skills and tools in the field of pharmacy.
- 4-Skill in maintaining and operating pharmaceutical devices.

#### **Ethics**

- 1– The student's interest in effective communication with those involved in the field of specialization.
- 2- Developing the student's ability to benefit from available resources.
- 3- Enhancing the student's ability to perform daily tasks.
- 4- A love of knowledge and benefiting from science.

# 9. Teaching and Learning Strategies

(theoretical lectures, discussion and dialogue, practical lectures, field visits, discussion circles, laboratories, office activities, solving examples, graduation project, summer training)

#### 10. Evaluation methods

Oral tests, written tests, weekly reports, daily attendance, midterm and final exams.

#### 11. Faculty **Faculty Members Special** Requirement Number of the **Specialization** Academ s/Skills (if teaching staff ic Rank applicable) **Special** General Staff Lecturer microbiolo Teacher **Biology** staff gy Life-Assistant Chemistry staff teacher Sciences related Chemistry Assistant Analytical staff teacher Sciences Assistant **Biology** Virology lecturer teacher Biology Assistant lecturer Physiology teacher Chemistry Assistant lecturer Analytical teacher Sciences

Assistant teacher	Chemistry Sciences	Organic	lecturer
Assistant teacher	Pharmaceutical Techniques		lecturer
Assistant teacher	Pharmaceuticals		lecturer
Assistant teacher	Medicines and poisons		lecturer
Assistant teacher	Pharmaceutical Chemistry		lecturer
Assistant teacher	Industrial Pharmacy		lecturer
Assistant teacher	Pharmaceutical Chemistry		lecturer
Assistant teacher	Industrial Pharmacy		lecturer

# **Professional Development**

# Mentoring new faculty members

- 1- Conduct weekly seminars and presentations to develop the skills of faculty members in delivering lectures or scientific research and effective communication methods with the audience.
- 2- Encourage them to participate in the continuous education branch courses and other scientific activities and academic workshops.
- 3- Support them to participate in external conferences and various community service works.

# Professional development of faculty members

The department is working on improving the personal performance of the teaching staff and enhancing their career advancement to maintain the competence of pharmacists and elevate their knowledge and skills within the healthcare system, in addition to their role in academic work. Therefore, one of the requirements for the promotion of faculty members is active participation in establishing and attending continuous professional development activities such as workshops, seminars, courses, organizing scientific forums, or awareness lectures, and collaborating with healthcare institutions to establish educational activities aimed at addressing gaps in knowledge and skills, as well as conducting free awareness campaigns on important topics that affect public health such as drug abuse, autism, chronic and widespread diseases, and educating patients about their treatments.

## 12. Acceptance Criterion

The admission standards for the daytime study are part of the central admission plan approved by the Ministry of Higher Education and Scientific Research.

The admission standards for the evening study are identical to the actual admission plan for daytime study.

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

The website of the Technical Institute / Al-Door in both Arabic and English

The website of the Northern Technical University

The website of the Ministry of Higher Education and Scientific Research

The page of the Technical Institute / Al-Door on social media

## 14. Program Development Plan

Updating and developing curricula according to labor market requirements through specialized committees for curriculum updates. Conducting regular surveys for the beneficiaries from students, the community, and employers in pharmacies, hospitals, and pharmaceutical factories regarding the department's mission and objectives, the curricula, teaching methods, and evaluation. Expanding the use of electronic technologies in training. Opening up to the community and providing volunteer activities. Directing students' research towards practical projects that address community issues.

			Prog	ram S	Skills (	Outlin	e								
						Re	quire	d prog	gram I	_earni	ng out	comes	S		
Year/Level	Course	rse Course Name	Basic or		Knov	vledge	}		Sk	ills			Eth	ics	
	Code		optional	A1	A2	<b>A3</b>	A4	B1	B2	В3	<b>B4</b>	C1	<b>C2</b>	<b>C3</b>	<b>C4</b>
2024/2025	NTU 100	Human Rights and Democratic	Essential	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х
Level one	NTU 101	English language	Essential	Х			Х	Х	Х		Х	Х	Х		
	NTU 102	Principles computer	Essential	Х		Х	Х	Х	Х			Х	Х		Х
	NTU 104	Arabic	Essential	Х			Х	Х	Х			Х	Х		
	NTU 105	Sport (optional)	Optional	Х		Х	Х	Х	Х		Х	Х	Х		Х
	TID 106	Physiology	Essential	Х	Х	Х	Х	Х	Х			Х	Х	Х	Х
	TID 108	Laboratory and workshop safety	Essential	Х		Х	X	Х	Х	Х	Х	Х	Х		Х
	TID 109	Medical Terminology	Essential	Х		Х	Х	Х	Х			Х	Х		Х
	TID 110	Anatomy	Essential	Х				Х	Х			Х	Х		
	PHT 112	Principles Pharmacy	Essential	Х		Х	Х	Х	Х				Х		Х

	PHT 113	Basics of Organic chemistry	Essential	Х			Х	Х	X		Х	Х		
	PHT 114	Analytical Chemistry	Essential	Х			Х	Х	X		Х	Х		
	PHT 115	Pharmaceutical Calculation	Essential	X			X	Х	X		X	X		
	PHT 116	Organic Chemistry	Essential	X			Х	X	Х		Х	Х		
	PHT 120	Microbiology	Essential	X	Х	X	X	Х	X		Х	Х	X	Х
	PHT 117	Biochemistry	Essential	X		X	X	X	Х	Х	X	X		X
	PHT 118	First aid	Optional	X		Х	Х	X	X	X	Х	Х		Х
2024/2025	NTU 203	crimes of the Ba'ath regime in	Essential	Х			Х	Х	Х		Х	X		
Level two		Iraq												
	NTU 202	Arabic	Essential	Х		Х	Х	Х	Х		Х	Х		Х
	NTU 204	Professional Ethics	Essential	Х		Х	Х	Х	Х		Х	Х		Х
	TID 202	Statistics	Essential	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
	PHT 203	Pharmaceuticals	Essential	Х	Х	Х	X	Х	Х			Х	Х	Х
	PHT 204	Industrial Principles	Essential	X			X	Х	X			X		
	PHT 205	Principle of pharmaceutical chemistry	Essential	X		X	X	X	X		X	X		X

PHT 206	Principle of Drugs	Optional	Х		Х	X	X	X			Х		Χ
PHT 207	Medicinal plants and natural products	Essential	X			X	X	X		X	Х		
PHT 208	Basic of Applied therapeutic	Essential	Х			X	Х	Х		Х	Х		
PHT 209	Toxicology	Essential	Х			Х	Х	Х		Х	Х		
PHT 211	Pharmaceutical Formulation	Essential	Х			Х	Х	Х		Х	Х		
PHT 212	Industrial Pharmacy	Essential	Х			Х	Х	Х			Х		
PHT 213	Pharmaceutical chemistry	Essential	Х			Х	Х	Х		Х	Х		
PHT 214	Pharmacology	Essential	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х
PHT 215	Therapeutics Application	Essential	Х			Х	Х	Х		Х	Х		
PHT 216	Pharmacognosy	Essential	Х				Х	Х		Х	Х		
PHT 210	Proposal	Essential	Х				Х	Х		Х	Х		
PHT 217	Community Health	Essential	Х			Х	Х	X		Х	Х		