

**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

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: Alnoor University collage

Faculty/Institute: Alnoor University collage

Scientific Department: medical laboratories techniques

Academic or Professional Program Name:

Final Certificate Name: B.SC. medical laboratory techniques

Academic System: yearly / courses

Description Preparation Date: Feb.2024

File Completion Date: 29/2/2024

Signature: 

Head of Department Name:

Prof.dr .Yassar Yahya Husain

Date: 3/3/2024

Signature: 

Scientific Associate Name:

Prof.Dr. Samer Khalaf Abdullah


Date: 3.4.2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature: 

Dr. Nadhim allawi alshahir;



Approval of the Dean

yassen Al-Hajjar

1. Program Vision

The Department of Medical Laboratory Techniques is considered one of the important departments within the medical field due to its effective role in providing skilled personnel in the field of medical analysis, both in the laboratories of the Ministry of Health and the private sector. Additionally, this department plays a significant role in supporting the scientific and research aspect by leveraging the expertise of faculty members to enhance scientific research.

2. Program Mission

The Department of Medical Laboratory Techniques was established according to the principles of scientific advancement, with its fundamental structure serving as the basis for scientific progress. The department plays an active role in diagnosing and treating many medical conditions. Additionally, it works to expand and build connections with institutions and related departments to enhance diagnostic capabilities, enabling beneficiaries to receive accurate and timely diagnoses. Moreover, it adopts a research-oriented approach for professionals in related sectors to develop work methodologies and ideas that serve the community as a whole.

3. Program Objectives

- The department aims to train specialized professionals in the field of medical analysis, equipping them with knowledge of all laboratory analytical tests. Upon completing the four years of study, graduates are prepared to work in both public and private healthcare institutions.
- It seeks to create specialized teams capable of keeping pace with scientific and technological advancements in diagnostic medicine based on the results of medical analysis.
- It enhances diagnostic capabilities by integrating with other health branches and departments.
- It contributes to the local market by providing specialized expertise in the healthcare field in general and the laboratory sector in particular.
- Emphasis is placed on accuracy in work and relying on correct test results, as they play an essential role in diagnosing injuries and health conditions, thereby aiding in their treatment promptly.

- Active contribution to scientific research is achieved by utilizing the department's laboratories to assist professors and specialists in fulfilling the requirements of scientific research.

4. Program Accreditation

Does the program have program accreditation? And from which agency?
 Yes , ministry of Higher Education of Iraq.

5. Other external influences

Is there a sponsor for the program?
 None

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	3	8	%4.2	
College Requirements	7	16	%8.4	
Department Requirements	23	166	%87.4	
Summer Training	2	None		It is mandatory and is not considered a course
Other		190		

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
1 st year first and second course			theoretical	practical
		Chemistry (1+2)	4	4
		Human biology (1+2)	4	4
		Laboratory instruments (1+2)	4	4
		Computer principles (1+2)	4	
		medical terminology	2	
		Human anatomy	2	
		Professional ethics	2	
		English language	2	
		Arabic language	2	
Year/Level	Course Code	Course Name	Credit Hours	
2 nd year first and second course			theoretical	practical
		Medical bacteriology (1+2)	4	4
		Biochemistry (1+2)	4	4
		Human physiology (1+2)	4	4
		Histology (1+2)	4	4
		Medical parasitology (1+2)	4	4
		Molecular biology	2	2
		Biostatistics	1	1
	Baath crimes	1		

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
Third year first and second course				
		Histopathology	2	3
		Hematology	2	2
		Virology and mycology	2	2
		Clinical chemistry	2	2
		Human genetics	2	3
		Advanced laboratory techniques	2	2
		Computer application	1	2
		Immunology	2	2
Year/Level	Course Code	Course Name	Credit Hours	
fourth year first and second course			theoretical	practical
		Clinical immunology	2	4
		Diagnostic bacteriology	2	4
		Advanced clinical chemistry	2	4
		Medical parasitology	2	4
		blood transfusion	2	4
		Pathology	1	3
		Research project		5
		Laboratory management	1	
		English language	2	

8. Expected learning outcomes of the program

Knowledge

- 1- Teaching students subjects related to medical laboratory specialties.
- 2- Preparing and performing various techniques used in medical laboratories.
- 3- Training students on communication skills with patients and how to obtain samples from them for laboratory use.
- 4- Interpreting the results obtained from analysis and assessing their correlation with the diagnosis of the condition.

Learning Outcomes Statement 1:

- 1- The student demonstrates proficiency in all scientific terminology relevant to medical laboratory work.
- 2- The student engages in thorough research and follows precise methodologies when conducting tests.
- 3- The student accurately documents all laboratory work results, both in physical and electronic formats, facilitating easy access to these results when needed.
- 4- The student adheres to professional conduct standards when interacting with patients and maintains confidentiality of information.
- 5- The student efficiently utilizes computer technology to ensure its application across various laboratory devices.

Skills

- 1- Utilizing equipment used in medical laboratories.
- 2- Training on the use of modern laboratory devices, especially automation.
- 3- Independently executing various laboratory techniques.
- 4- Drawing blood from patients in a professional and scientific manner.

Learning Outcomes Statement 2:

- 1- Efficiently obtaining necessary samples for laboratory analysis.
- 2- Skillfully utilizing laboratory equipment and devices.
- 3- Documenting results along with patient information.
- 4- Using automated laboratory devices and understanding their operation mechanisms.

Learning Outcomes 3

Learning Outcomes Statement 3

Ethics

- 1- Analyzing laboratory results.
- 2- Establishing correlations between laboratory results and patient condition.
- 3- Writing laboratory reports clearly and scientifically.
- 4- Continuously improving laboratory work.

Learning Outcomes Statement 4:

- 1- Interpreting analysis results in light of the information provided by the treating physician.
- 2- Identifying laboratory tests for patients based on their inquiries in the event of not consulting a physician.

	3- Writing laboratory result reports clearly to assist both the physician and the patient, indicating the necessity for retesting if needed. 4- Continuously updating work methods and equipment used.
Learning Outcomes 5	Learning Outcomes Statement 5

9. Teaching and Learning Strategies

- 1- Theoretical lectures in classrooms.
- 2- Presenting real or virtual explanatory videos.
- 3- Conducting practical experiments in the laboratory and efficiently using laboratory equipment.
- 4- Official visits to both public and private laboratories to observe work procedures and modern equipment.

10. Evaluation methods

- 1- Weekly reports on practical experiments.
- 2- Periodic tests for theoretical subjects.
- 3- Semester exams covering both theoretical and practical aspects.
- 4- Final exams encompassing both theoretical and practical components.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Prof.Dr. Yassar Yahya Hussein Abdullah	Chemistry	Clinical Biochemistry			√	

Prof. Dr.Sameer Khalaf Abdullah Hussein	Life Sciences	Mycology			√	
Assiss. Prof. Dr.Nabil Ahmed Georges Ahmed	Veterinary Medicine	Biochemistry			√	
Assiss. Prof.Dr. Mona Taher Mohammed Osman	Life Sciences	Zoology			√	
Assiss. Prof. Dr.Hadi Mohammed Ahmed Swadi	Life Sciences	Physiology			√	
Prof. Dr.Ismail Saleh Ibrahim Saleh	Life Sciences	Physiology			√	
Assiss. Prof. Dr.Sahla Mohammed Zidan Sarhan	Life Sciences	Botany			√	
Dr. Thabet Muath Omar Bashir	Veterinary Medicine	Immunology			√	
Dr. Intisar Hajim Mohammed Abdullah	General Medicine and Surgery	Obstetrics and Gynecology			√	
Dr. Sadeq Bakr Mar'i Oheid	General Medicine and Surgery	General Surgery			√	
Dr. Ibrahim Khalil Sarhan Osman	Agriculture and Forestry	Soil Fertility and Plant Nutrition			√	
Asst. Prof.Dr. Sanaa Mohammed Tayeb Amin	General Medicine and Surgery	Pathology (Hematology)			√	
Mr. Laith Yassin Qasim Yahya	Chemistry	Chemistry			√	
Dr. Bashar Abdullah Saeed Dhanoun	General Medicine and Surgery	Pathology (Hematology)			√	
Mr. Shamil Shukr Mahmoud Mustafa	Chemistry	Chemistry			√	

Mr. Jamal Mohammed Hussein Ali	Life Sciences	Life Sciences			√	
DR. An'am Anad Jubouri Mustafa	Veterinary Medicine	Veterinary Physiology			√	
Mr. Talal Aziz Qasim Abdullah	Chemistry	Chemistry			√	
Miss. Ameenah Mohammed Abdul Aziz Abdullah	Veterinary Medicine	Veterinary Pathology			√	
Miss. Amina Ya'arub Hameed Abdullah	Life Sciences	Microbiology			√	
Miss. Ban Abdul Aziz Eid Han Hassan	Life Sciences	Botany			√	
Miss. Khadija Ismail Mohammed Mustafa	Life Sciences	Microbiology			√	
Miss. Lamia Abdul Latif Saloom Nasser	Life Sciences	Life Sciences			√	
Mr. Ali Ibrahim Ahmed Saleh	Software Engineering	Software Engineering			√	
Miss. Fatima Muayyad Sami Yassin	Environmental Sciences and Technologies	Environmental Sciences			√	
Miss. Tamara Nizar Saeed Hameed	Life Sciences	Life Sciences			√	
Miss. Baraa Mohammed Yassin Mohammed	Chemistry	Clinical Biochemistry			√	
Miss. Raghda Ali Bakr Mustafa	Chemistry	Analytical Chemistry			√	
Assiss. Prof. Fawaz Fadel Ali	Veterinary Medicine	Virology				√
Dr. Zaid Khudair Mahmoud	Veterinary Medicine	Genetics				√
Dr. Iman Hazem George	Veterinary Medicine	Physiology				√

Professional Development

Mentoring new faculty members

Introducing new faculty members to the academic curriculum vocabulary, its implementation methodology, and how to develop the study plan within the available time frame, along with mechanisms and online tools for interacting with students and methods of student assessment.

Professional development of faculty members

Encouraging faculty members to enhance the curriculum vocabulary, incorporate scientific advancements, and utilize visual methods in explaining subjects, including live demonstrations or using educational videos.

12. Acceptance Criterion

(Centralized admissions are conducted in accordance with the guidelines issued by the Ministry of Higher Education, which determine admission criteria and the number of students admitted.

13. The most important sources of information about the program

- 1- College Registrar's Office
- 2- Department Administration
- 3- College's Official Website on the World Wide Web (Internet)

14. Program Development Plan

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 level (first semester and second semester)		General chemistry	Basic	✓	✓				✓	✓							✓				
		General chemistry	Basic	✓	✓					✓	✓							✓			
		Human biology	Basic	✓	✓			✓										✓			
		Human biology	Basic	✓	✓			✓										✓			
		Laboratory instruments	Basic	✓	✓			✓										✓			
		Laboratory instruments	Basic	✓	✓			✓										✓			
		Computer principles	Basic	✓				✓										✓			
		Computer principles	Basic	✓				✓										✓			

																	√	√	
																	√		√
													√						

• Please tick the boxes corresponding to the individual program

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			
				2 nd year first and second course		Medical bacteriology	Basic	✓	✓		✓	✓		✓	✓			✓
		Medical bacteriology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Biochemistry	Basic	✓	✓	✓	✓		✓	✓	✓			✓	✓			
		Biochemistry	Basic	✓	✓	✓	✓		✓	✓	✓			✓	✓			
		Human physiology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Human physiology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Histology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Histology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Medical parasitology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			
		Medical parasitology	Basic	✓	✓		✓	✓		✓	✓			✓	✓			

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					
Third year first and second course		Histopathology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Hematology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Virology and mycology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Clinical chemistry	Basic	✓																
		Human genetics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Advanced laboratory techniques	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Computer application immunology	unessential	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- Please tick the boxes corresponding to the individual program

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												
				fourth year first and second course		Clinical immunology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Diagnostic bacteriology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Advanced clinical chemistry	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Medical parasitology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		blood transfusion	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Pathology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

• Please tick the boxes corresponding to the individual program

- learning outcomes under evaluation.