

**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 academic programs and course descriptions 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:** .....

**Faculty/Institute:** .... **Al-Kut University College**.....

**Scientific Department: . Department of Medical Laboratory  
Technologies.....**

**Academic or Professional Program Name: .. Bachelor's degree.....**

**Final Certificate Name: .... Bachelor of Science in Medical Laboratory  
Technology.....**

**Academic System: ... semester.....**

**Description Preparation Date: 2024\1\31**

**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**

- Establishing specialized medical laboratories
- Creating postgraduate studies (master's and doctorate) in pathological analysis specializations
- Hosting pathological analysis specialists from prestigious universities in the world in order to raise the academic level of graduates and place them in the ranks of colleges in prestigious universities.

## 2. Program Mission

The program mission is written here as stated in the university's catalog and website.

## 3. Program Objectives

1- The graduate must be proficient in the process of drawing blood and dealing with all laboratory samples, collecting and transporting them, with the ability to deal with all laboratory equipment.

2 – The graduate must be proficient in microbiology examinations with the necessary knowledge of how to use all the necessary techniques to diagnose the bacterial causes of diseases and be able to give the correct opinion on this subject while conducting examinations in all branches of life, including viruses, fungi, parasites and bacteria.

3 – The graduate should be able to study clinical immunology and identify the immune mechanism responsible for the pathogenesis of common immune diseases. And to distinguish the different diagnostic methods as well as the important differential examinations for each disease and conduct them.

4 – The graduate should be able to practice basic skills in chemistry and be

familiar with how to prepare solutions of different concentrations, in addition to diagnosing organic and life materials and conducting laboratory tests related to biochemistry, including hormones and others.

5 – The graduate must be proficient in the histology subject, prepare histological sections for that purpose, and conduct all partial tests, pathological parameters, and staining for histological sections.

6 – The graduate should be able to deal with what happens with blood transfusion and donation, diseases acquired through blood transfusion, and conduct all laboratory tests related to hematology.

7 – Its ability to deal with all modern technologies, including DNA analysis and forensic medicine

#### 4. Program Accreditation

Does the program have program accreditation? And from which agency?

#### 5. Other external influences

Quality Assurance Program of the Ministry of Higher Education and Scientific Research

#### 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements				
College Requirements				

<b>Department</b>				
<b>Requirements</b>				
<b>Summer Training</b>				
<b>Other</b>				

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

## 7. Program Description

Credit Hours		Course Name	Course Code	Year/Level
practical	theoretical			
4	2	General Chemistry	<b>ML11</b>	First-year
4	2	Anatomy & Medical Terminology	<b>ML12</b>	
4	2	Human biology	<b>ML13</b>	
3	1	Lab. Instrumentation	<b>ML14</b>	
--	2	Medical Ethics	<b>ML15</b>	
2	1	Computer Application	<b>ML16</b>	
--	1	Human rights	<b>ML17</b>	
	1	English Language	<b>ML18</b>	
4	2	Medical Microbiology	<b>ML21</b>	Second Year
4	2	Clinical Biochemistry	<b>ML22</b>	
2	2	Human physiology	<b>ML23</b>	
2	2	Histology	<b>ML24</b>	
4	2	Molecular Biology	<b>ML25</b>	
4	2	Medical parasitology	<b>ML26</b>	
	1	English Language	<b>ML27</b>	
3	2	Histopathology	<b>ML31</b>	
3	2	Hematology	<b>ML32</b>	Third year
2	2	Virology & Mycology	<b>ML33</b>	
2	2	Clinical Chemistry	<b>ML34</b>	
3	2	Cytogenetic	<b>ML35</b>	
2	2	Immunology	<b>ML36</b>	
2	2	Advanced laboratory technique	<b>ML37</b>	
2	1	Computer Application	<b>ML38</b>	
	1	English Language	<b>ML39</b>	



4	2	Clinical Immunology	<b>ML41</b>	Four year
4	2	Diagnostic Microbiology	<b>ML42</b>	
4	2	Advance Clinical biochemistry	<b>ML43</b>	
4	2	Parasitology	<b>ML44</b>	
4	2	Blood transfusion	<b>ML45</b>	
2	3	Histopathology	<b>ML46</b>	
	1	Laboratory Management	<b>ML47</b>	
	1	English Language	<b>ML48</b>	
2	1	Biostatic	<b>ML49</b>	
5		Project	<b>ML410</b>	

### 8. Expected learning outcomes of the program

<b>Knowledge</b>	
Learning Outcomes 1	Learning Outcomes Statement 1
<b>Skills</b>	
Learning Outcomes 2	Learning Outcomes Statement 2
Learning Outcomes 3	Learning Outcomes Statement 3
<b>Ethics</b>	
Learning Outcomes 4	Learning Outcomes Statement 4
Learning Outcomes 5	Learning Outcomes Statement 5

### 9. Teaching and Learning Strategies

Teaching and learning strategies and methods adopted in the implementation of the program in general.

### 10. Evaluation methods

Implemented at all stages of the program in general.

### 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

Briefly describe the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

#### Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

### 12. Acceptance Criterion

**Central admission to the Ministry of Higher Education and Scientific Research)**

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

Student guide for central admission prepared by the Ministry of Higher Education and Scientific Research

### 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

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

## Course Description Form

<b>1. Course Name:</b>	
Virology and Mycology	
<b>2. Course Code:</b>	
ML 33	
<b>3. Semester / Year:</b>	
Year	
<b>4. Description Preparation Date:</b>	
31\1\2024	
<b>5. Available Attendance Forms:</b>	
Official working hours	
<b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>	
Number of hours (6) / Number of units (4)	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: M.Sc. Atheer Fouad Awad    Email : Atheeralshohani@gmail.com M.Sc. Huda Jabbar M.Sc. Yasser Saad	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<b>Virology and Mycology aims to introduce the student viruses and fungi that pose a threat to human health. It is diagnosed and treated so that the student becomes familiar with this science at the end of the academic year.</b>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>- Self-learning, discussion panels.</li> <li>- Exercises and activities in the classroom, focusing on the practical and laboratory aspects.</li> <li>- Directing students to some websites to benefit from them to develop their capabilities.</li> <li>- Solving problems as extracurricular assignments</li> </ul>
<b>10. Course Structure</b>	

Week	Subject
1	General properties of Viruses.
	Structure, Classification and Nomenclature of the Viruses.
2	Atypical Virus-like agents (Prions, Defective viruses, Pseudovirion and Viriods).
3	Viral Genetic and Molecular&Viral Replication.
4	Viral Pathogenesis and Transmission
5	Immunity &Laboratory Diagnosis of Viruses
6	Herpes virus
7-8	Hepatitis virus
9	Human Immune Deficiency virus
10	Orthomyxovirus
11	Paramyxovirus
12	Enteric viruses ( Rota, Polio and Reo viruses)
13	Rabies and other Neurotropic viruses
14	Poxvirus
15	Coronavirus
16	Adeno and Parvo viruses
17	Arbovirus
18	Oncogenic viruses
19	Bacteriophages (Bacterial viruses)
20	Antiviral Drugs&Viral vaccines
	الفصل الثاني
21	Introduction to medical mycology, History and
22	Morphology, Classification, reproduction of pathogenic fungi
23	Superficial mycosis : Tinea types and Dematiaceuos (black fungi
24	Cutaneous mycosis: Trychphyton spp, Microsporium spp and Epidermophyton spp
25	Subcutaneous mycosis: Sporothricosis and Mycetoma
26	Infection due to filamentous fungi (Zygomycosis and Aspergillosis)
27	Infection caused by yeasts(Candidiasis and Cryptococcosis
28	Opportunistic mycosis: Mucor and Penicillois. Aantibiotics produced by fungi
29	Systemic mycosis: Coccidiomycosis and Blastomycosis
30	Histoplasmosis and Paracoccidiomycosis Antifungal agents and Mycotoxins

## 11. Course Evaluation

Participation in the classroom.

Providing various activities.

- Not less than four written semester exams during the academic year, in addition to the theoretical final exam

And practical.

- Assignments and reports to solve questions in the form of extracurricular activities.

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

Jawetz, Melnick & Adelberg's Medical Microbiology 24th Edition

Recommended books and references (scientific journals, reports...)

Review of medical microbiology and immunology, W Levinson - dilatoz.

Electronic References, Websites

1. Zafar, F., Jabeen, K. and Farooqi, J. (Eds.). (2017). Practical guide and atlas for the diagnosis of fungal infection., the aga kh university, india.
2. Campbell, Colin K., Elizabeth M. Johnson, and David W. Warnock. (2013). Identification of Pathogenic Fungi, 2nd ed. Chichester, West Sussex ,Wiley-Blackwell