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

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 V ision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program M ission: 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: .... Al Qasim Green University.....

Faculty/Institute: ..... College of Science.....

Scientific Department: ..... Biology.....

Academic or Professional Program Name: . Bachelor's degree... Pathological Analysis Sciences..... Final Certificate Name: .... Bachelor's degree... Biology Sciences.....

Academic System: …… courses

Description Preparation Date: 1/10/2025

File Completion Date: 1/10/2025

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:

.1 **Program Vision**
The College of Science seeks to prepare graduates in the field of Biology sciences to work in government departments and benefit from specialization in the practical and applied field.website.

.3 Program Objectives

1. Knowledge and understanding of Biology science and related local, regional and global standards.

2. Scientific and research skills that enable identifying all types of factors affecting human health and organisms.

3. Research and thinking skills, as well as analysis, enable solving problems related to diseases that affect living organisms, especially the organisms race, in accordance with approved international standards.

4. Employment and self-development skills enable competition with others in the labor market.

5. Academic and research skills that enable competition in postgraduate studies.

.4 Program Accreditation

Nothing

.5 Other external influences

Nothing

.6 Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	54	212		
College Requirements	Yes			
Department Requirements	Yes			
Summer Training	No			
Other				

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

Year/Level	Course Code	Course Name	Credit Hours		
2025-2026 / first		Zoology	2	2	8
		Biophysics	2	2	7
		Organic Chemistry	2	2	7
		Fundamentals of Physiology	2	2	3
		General Mathematics	2	0	4
		Democracy and Human Rights	2	0	2
		Arabic Language	2	0	2
		Botany	2	2	8
		Analytical Chemistry	2	2	7
		Biostatistics	2	0	5
		English Language	2	0	2
		Computer Science	2	2	3
		Biosafety and Biosecurity	2	0	5
2025-2026 /second		Plant Anatomy	2	2	5
		Invertebrate	2	2	5
		Microbiology I	2	2	5
		Plant Taxonomic Groups	2	2	5
		Biochemistry I	2	2	5
		Entomology	2	2	5
		Plant Taxonomy	2	2	5
		Biochemistry II	2	2	5
		Insect Taxonomy	2	2	5
		Microbiology II	2	2	6
		English Language	2	0	2
		Computer Science	2	2	3
		Arabic Language	2	0	2
		Crimes of the Ba'ath Regime in Iraq	2	0	2
		Animal Physiology	2	2	4

2025-2026 /Third		Ecology	**2**	**2**	**4**
		Histology	**2**	**2**	**4**
		Immunology	**2**	**2**	**4**
		Medicinal Plants	**2**	**2**	**4**
		Parasitology	**2**	**2**	**4**
		General Mycology	**2**	**2**	**3**
		Microbial Physiology	**2**	**2**	**3**
		Genetics			
		Pathological Analysis			
		Plant Physiology			
		Cell Biology			
		Environmental Pollution			
		Fungal Taxonomy			
		Scientific Research Methodology			
2025-2026 /Forth		Pathogenic Bacteria	**2**	**2**	**3**
		Food Microbiology	**2**	**2**	**3**
		Chordates	**2**	**2**	**3**
		English Language	**2**	**0**	**2**
		Molecular Biology	**2**	**2**	**3**
		Medical Mycology	**2**	**2**	**3**
		Evolution	**2**	**0**	**2**
		Virology	**2**	**2**	**3**
		Antibiotics	**2**	**2**	**3**
		Industrial Microbiology	**2**	**2**	**3**
		Endocrinology	**2**	**2**	**3**
		Graduation Research Project			**1**

.8 Expected learning outcomes of the program

Knowledge	
Learning Outcomes 1	1- Enabling students to obtain knowledge and understanding of the intellectual and skill framework of the biology Department A2 - Enabling students to obtain knowledge and understanding of the ethics of the biology profession and applied medical sciences A3 - Enabling students to obtain knowledge and understanding of pathogens

	A4 - Enabling students to obtain knowledge and understanding of pathogens and their transmission methods A5 - Enabling students to obtain knowledge and understanding of the physical, chemical and biological causes affecting humans A6 - Enabling students to obtain knowledge and understanding of microorganisms and the environment affecting human health
Skills	
- Enabling students to solve problems related to biology.	
Ethics	
- Developing students' abilities to share ideas	

.9 Teaching and Learning Strategies

Providing students with the basics and additional topics in-depth with the previous learning outcomes of skills, to solve scientific problems at the scientific level in various fields of biology.

• Applying topics studied theoretically

• Asking students during practical lessons to conduct some scientific and research investigations under the supervision of their teachers

• Visiting scientific laboratories by academic staff and scientific committees in the department and college. The program in general.

.10 Evaluation methods

Daily and monthly exams

• Weekly reviews and participation grades for academic topics

• Grades for weekly reports and activities

• Mid-term and final exams

11. Teaching Staff

Name	Academic Rank	Major	Special Skills	General Specialization	Specific Specialization	Employment Type
Dhekra Adnan Jawad Kazem	Professor	Biology	Microbiology			Permanent
Hawraa Mahmoud Murad Nawroz	Assistant Professor	Veterinary Medicine & Surgery	Histopathology			Permanent
Aqeel Alaa Hussein Abbas	Assistant Professor	Chemistry				Permanent
Muhannad Mohammed Sahib Ghali	Assistant Professor	Biology	Botany			Permanent
Ruaa Safaa Abbas	Assistant Professor	Biology	Animal Physiology			Permanent
Safa Hassan Radhi Joudah	Assistant Professor	Biology	Medical Microbiology			Permanent
Hassan Mohammed Kazem Hassoun	Assistant Professor	Arabic Language				Permanent
Zaman Salman Hamza	Assistant Professor	Biology	Microbiology			Permanent
Fadel Radhi Mohammed Hammoud	Assistant Professor	Law				Permanent
Sura Abdul-Khaliq Ameen Mohammed	Assistant Professor	Biology	Zoology			Permanent
Zahraa Essam Jameel Yasser	Lecturer	Biology	Molecular Genetics			Permanent
Mustafa Jaafar Hussein Mahmoud	Lecturer	Biology	Virology			Permanent
Maryam Sabeeh Ali	Lecturer	Mathematics				Permanent
Jasim Mohammed Yasin Ali	Lecturer					Permanent
Nazem Thaheeli	Lecturer	English				Permanent

Salem Ubayes		**Language**				
Batool Abdulhadi Sultan	**Lecturer**	**Computer Science**				**Permanent**
Ahmed Mansour Mohsen	**Lecturer**	**Chemistry**				**Permanent**
Haider Omran Issa	**Lecturer**	**Physics**				**Permanent**
Laith Taha Mohammed Hassoun	**Assistant Lecturer**	**Biology**	**Ecology**			**Permanent**
Shahad Abdulrahman Jassim Ibrahim	**Assistant Lecturer**	**Biology**	**Microbiology**			**Permanent**
Hanan Ali Kareem Ali	**Assistant Lecturer**	**Biology**	**Botany**			**Permanent**
Safa Nazem Madhnoon Hamzah	**Assistant Lecturer**	**Biology**				**Permanent**
Aseel Hadi Hamzah Jarallah	**Assistant Lecturer**	**Agricultural Sciences**	**Medicinal Plants**			**Permanent**
Worood Amer Abdulameer Jabbar	**Assistant Lecturer**	**Agricultural Sciences**	**Soil & Water Resources**			**Permanent**
Mohammed Abdulkarim Salman Sakban	**Assistant Lecturer**	**Law**				**Permanent**
Mohammed Shibeeb Abd Rmeidh Al-Khalidi	**Assistant Lecturer**	**Geology**	**Air Pollution**			**Permanent**
Shorouq Ali Mohammed	**Assistant Lecturer**	**Agricultural Sciences**	**Mycology**			**Permanent**
Reem Jassim Mohammed	**Assistant Lecturer**	**Biology**	**Microbiology**			**Permanent**
Zahraa Nasr Jawad Salman	**Assistant Lecturer**	**Biology**	**Parasitology**			**Permanent**
Israa Kazem Joudah	**Assistant Lecturer**	**Physics**	**Nuclear Physics**			**Permanent**

.11 Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Professor	Biology	Microbiology			-	
Assistant Professor	Biology	Histology			-	
Assistant Professor	Biology	zoology			-	
Assistant Professor	Biology	Plant physiology			-	
Assistant Professor	Biology	Medical microbiology			-	
Assistant Professor	Arabic	Arabic poetry			-	
Assistant Professor	Biology	Parasites			-	
Assistant Professor	Chemistry sciences	Organic chemistry			-	
Assistant Professor	Biology	Animal physiology			-	
Teacher	Biology	Environment			-	
Assistant Professor	Physics Science	Medical physics			-	
Assistant Professor	Special law	Law personal conditions			-	
Teacher	Political science	Political science			-	

Teacher	Medical microbiology	Bacterial genetics			-	
Teacher	Mathematics	algebra			-	
Teacher	Physics Science	Medical physics			-	
Teacher	Microbiology	viruses			-	
Teacher	Arabic	Methods of teaching the Arabic language **12**			-	
Teacher	Computer	Computer software			-	
Teacher	English	Teaching methods			-	
Teacher	Chemistry sciences	analytical chemistry			-	
Assistant teacher	Chemistry Science	Biochemistry			-	
Assistant teacher	Biology	Pathogenic bacteria			-	
Assistant teacher	Agricultural Sciences	Soil			-	
Assistant teacher	Agricultural Sciences	Anatomy of a plant			-	
Assistant teacher	Biology	Plant physiology			-	
Teacher	Biology	Zoology			-	
Assistant teacher	Biology	Microbiology			-	
Assistant teacher	Biology	Bacteria			-	

Professional Development
Mentoring new faculty members
Briefly describes 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 according to the requirements of the Ministry of Higher Education and Scientific Research

.13 The most important sources of information about the program

The central library at the university and college
- Internet information network
- Experiences of Arab and international universities
- Current curriculum

.14 Program Development Plan

- Developing students' abilities in research and investigation through field visits to health institutions and educational laboratories, as well as projects related to biology.
- Encouragement to visit the library weekly
- Reviewing reference books, sources, and scientific journals in the field of specialization

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
2025-2026		zoology	Basic											
		Organic chemistry	Basic											
		Biophysics	Basic											
		Arabic languge	Optional											
		General mathmetics	Optional											
		Democrat and human rights	Optional											
		Computer	Optional											
		Botany	Basic											
		Safty and peaceful	Optional											
		Analytical chemistery	Basic											
		English language	Optional											
		Biostatic	Optional											
2025-2026/Second		General insects	Basic	-	-	-	-	-	-	-	-	-	-	-
		Anatomy of a plant	Basic	-	-	-	-	-	-	-	-	-	-	-
		Microbiology (1)	Basic	-	-	-	-	-	-	-	-	-	-	-
		Invertebrates	Basic	-	-	-	-	-	-	-	-	-	-	-
		Plant groups	Basic	-	-	-	-	-	-	-	-	-	-	-
		Biochemistry (1)	Basic	-	-	-	-	-	-	-	-	-	-	-
		Computer (1)	Basic	-	-	-	-	-	-	-	-	-	-	-
		Classification of insects	Basic	-	-	-	-	-	-	-	-	-	-	-
		Parasites	Basic	-	-	-	-	-	-	-	-	-	-	-
		Microbiology (2)	Basic	-	-	-	-	-	-	-	-	-	-	-
		Biochemistry (2)	Basic	-	-	-	-	-	-	-	-	-	-	-
		English language	Basic	-	-	-	-	-	-	-	-	-	-	-
		Baath crimes	Basic	-	-	-	-	-	-	-	-	-	-	-
		Computer (2)	Basic											
2025-2026/ third		Medical plants	Optional	-	-	-	-	-	-	-	-	-	-	-
		Cell	Basic	-	-	-	-	-	-	-	-	-	-	-

		Environment	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Histology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		General fungi	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Plant physiology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Immunology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Genetics	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Environmental pollution	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Microbiology physiology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Classification of fungus	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Animal physiology	**Basic**											
		Microbiology soil and water	**Basic**											
		English language	**Basic**											
		Basics of hematology	**Optional**											
2025-2026/fourth		Molecular biology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Endocrine glands	**Optional**	-	-	-	-	-	-	-	-	-	-	-
		Research project (1)	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Microbiology genetic	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		English language	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Industrial Microbiology	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Development	**Optional**	-	-	-	-	-	-	-	-	-	-	-
		Antibiotics	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Viruses	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Chordates	**Basic**	-	-	-	-	-	-	-	-	-	-	-
		Research project (2)	**Basic**											
		Medical fungi	**Basic**											
		Pathogenic bacteria	**Basic**											
		Food microbiology	**Basic**											

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