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: Al-Furat Al-Awsat Technical University

Faculty/Institute: College of Health and Medical Technologies/ Kufa

/Scientific Department: Department of Optics Technique

Academic or Professional Program Name: Bachelor of Optical Technology (Optometrist)

Final Certificate Name: Bachelor's degree in Optical Technique

Academic System: " Semester \ Annual Integrated Courses "

Description Preparation Date: 12/2/2024

File Completion Date: 17/2/2024

Signature:

Head of Department Name:

Dr. Zainb Abdalzahra

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Signature:

Scientific Associate Name:

Assistt Prof.Dr. Raad Ajam Sayel

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Assist.Lac.: Suhad Obaid Sabbi

Signature:

Approval of the Dean

1. Program Vision

The Department of Optics Technologies was established in 2021 as per the administrative order issued by the Ministry of Higher Education & Scientific Research, No. 13741 on 21st November 2021. The Department aims to graduate technicians with high proficiency, qualified to work in Ophthalmology hospitals, health centers and private clinics.

- **Study Period: 4 years**
- **Study Language: English**

2. Program Mission

Due to the widespread of using eyeglasses and lenses, there has been a great need to optometrists and visual technicians in the various institutions of health, whether public or private.

3. Program Objectives

Department of Optics Technologies focuses on achieving a number of objectives. They can be summarized as follows:

- **Providing efficient graduates, highly qualified in the field of ophthalmology so as to meet the country's need according to the medical and economical development requirements, all together with ensuring teaching staff for universities and institutes.**
- **Constant promotion to curricula and study plans for all grades so as to keep pace with the recent development in the field of ophthalmology.**
- **Keeping pace with the fast changes in the field of IT and analysis of medical data.**
- **Focusing on scientific research and its essential role in serving the community by conducting scientific and applied research.**
- **Interacting with the related public sector institutions to organize training courses for our medical staff.**
- **Striving to improve performance so as to achieve comprehensive quality assurance.**
- **Encouraging scientific cooperation with corresponding Arab and international universities and institutions.**
- **Exchanging experiences in a way that ensures development and reinforcement of the department as well as the educational process.**

4. Program Accreditation

The mission of the Department is summarized in providing graduates, qualified and highly trained in the field of ophthalmology, diagnosis of eye diseases and manufacture of eyeglasses as well as contact lenses. Graduates indeed shall be

featured with high level of knowledge and creativity in their major, in accordance with the international medical standards and quality assurance. The medical programs shall be corresponding to those adopted by the Department of Optics Technologies at the Technical Health College / University of Baghdad. Moreover, it is remarkable to note that the results shall be analyzed through the use of bio-statistics methods.

5. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	–	–	–	–
College Requirements	–	–	–	–
Department Requirements	34	180	50%	Basic
Summer Training	2	4	50%	Basic
Other	–	–	–	–

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

6. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	Practical
The first stage/first course	MU0541101	Anatomy of the head and neck	2	5
The first stage/first course	MU0541102	Principles of chemistry	2	4
The first stage/first course	MU0541103	Medical and optical physics 1	3	5
The first stage/first course	MU0541104	Biology 1	2	4
The first stage/first course	MU0541105	Computer principles 1	1	2
The first stage/first course	MU0541106	Human rights and democracy	2	0
The first stage/first course	MU0541107	English	3	0
First stage/second course	MU0541201	Anatomy of the eye	2	5
First stage/second course	MU0541202	Biochemistry	2	4

First stage/second course	MU0541203	**Medical and optical physics 2**	**3**	**5**
First stage/second course	MU0541204	**Biology 2**	**2**	**4**
First stage/second course	MU0541205	**Computer principles 2**	**1**	**2**
First stage/second course	MU0541206	**Arabic**	**2**	**0**
First stage/second course	MU0541207	**Baath Party crimes**	**2**	**0**
The second stage / first course	MU0542101	**Philosophy of the eye and vision 1**	**2**	**4**
The second stage / first course	MU0542102	**Optical devices 1**	**2**	**5**
The second stage / first course	MU0542103	**Ocular health 1**	**2**	**4**
The second stage / first course	MU0542104	**Refractive errors 1**	**2**	**5**
The second stage / first course	MU0542105	**Statistical applications1**	**1**	**3**
The second stage / first course	MU0542106	**Medical terms**	**2**	**0**
The second stage / second course	MU0542201	**Philosophy of the eye and vision 2**	**2**	**4**
The second stage / second course	MU0542202	**Optical devices 2**	**2**	**5**
The second stage / second course	MU0542203	**Ocular health 2**	**2**	**4**
The second stage / second course	MU0542204	**Refractive errors 2**	**2**	**5**
The second stage / second course	MU0542205	**Statistical applications 2**	**1**	**3**
The second stage / second course	MU0542206	**pharmaceutical**	**2**	**0**
The second stage / second course	MU0542207	**Lasers in ophthalmology**	**1**	**3**
The third stage	MU0543001	**Eye problems with internal and neurological diseases**	**1**	**3**
The third stage	MU0543002	**Medical glasses 1**	**2**	**4**
The third stage	MU0543003	**Strabismus 1**	**2**	**4**
The third stage	MU0543004	**Refractive errors2**	**2**	**4**
The third stage	MU0543005	**computer applications**	**1**	**2**
The third stage	MU0543006	**English**	**3**	**0**
The third stage	MU05403007	**Research methodology**	**2**	**0**
The third stage	MU0543008	**Optical devices2**	**2**	**4**
The fourth stage	MU0544001	**Eye diseases 2**	**2**	**2**
The fourth stage	MU0544002	**Strabismus 2**	**2**	**4**
The fourth stage	MU0544003	**Pediatric ophthalmology**	**1**	**2**

The fourth stage	MU0544004	**Glasses and contact lenses 2**	**2**	**4**
The fourth stage	MU0544005	**The project**	**0**	**6**
The fourth stage	MU0544006	**X-rays and ultrasound of the eye**	**1**	**2**
The fourth stage	MU0544007	**Ocular Prothesiss2**	**2**	**4**

7. Expected learning outcomes of the program

Knowledge	
1- Graduation of scientific cadres with specialization. 2- Operates and maintains the medical equipment used in eye examination. 3- Enabling students to obtain knowledge, intellectual understanding, and skills to identify vision testing devices and ways to maintain them. 4- Teaching the student the skills required to deal with different cases of eye diseases. 5- Enabling the student to contribute to understanding cases of eye disease and to intervene as necessary.	1- That the student knows the basics of the required sciences. 2- That the student understands the required scientific details. 3- The student should analyze scientific developments.
Skills	
1 - That the student uses the devices correctly. 2- That the student applies what he has learned in practice.	1- Good knowledge of the principles of optics and related sciences. 2 - Technical ability in his field of work and monitoring the patient's vital conditions.
1 - The student must bring the necessary materials.	1- Good knowledge of medical terminology. 2- Good knowledge of the English language.

2 - That the student performs the appropriate procedures for the situations he faces.	
Ethics	
1- Working as a team. 2- That the student recognizes the importance of academic subjects.	1- Commitment to the ethics of the university institution 2- Receiving information and cognitive receptivity

8. Teaching and Learning Strategies

1 - Classroom education through theoretical and practical lectures

2- Learning through hospitals

3- Preparing scientific reports and research.

9. Evaluation methods

1- Exams.

2- Writing and presenting reports and research.

3- Scientific discussions.

4- For daily attendance and activities.

10. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Dr.Zainb Abdalzahra	physics	Laser physics			Yes	
Dr. Alaa Hashim Abd Ali	Medical Laborator Techniques	Biosciences			Yes	

Dr. Aqeel Salim Raheem	physics	Laser and optoelectronics			Yes	
Dr. Dargham Abdul Jalil Rasoul	Engineer				Yes	
Assist. Lecturer Hanan Saad Hashem	Biology	Microbiology			Yes	
Assist. Lecturer Rusul Fadhil Abdul Abbas	Biology	Physiology			Yes	
Assist. Lecturer Zahraa Mohammed Mashkor	physics	physics			Yes	

Professional Development

Mentoring new faculty members

Directing new faculty members to the necessity of working on developing the scientific method, methods of delivering scientific lectures, and how to deliver practical material to the student

Professional development of faculty members

Working to find development ideas and working to develop scientific laboratories and the practical aspect, since the students' specialization is a scientific specialization.

11. Acceptance Criterion

Students who have graduated from preparatory school in the scientific branch are allowed to be accepted into the university's Optometry Technology Department after passing and succeeding in the study and obtaining an average of 70% or more for admission. The department accepts graduates of preparatory school in the scientific branch in biology only.

12. The most important sources of information about the program

1- Textbooks prescribed by the Ministry of Higher Education and Scientific Research

2- External scientific sources

3- Using libraries and the Internet

13. Program Development Plan
The department has many methodological and research plans in order to develop the department and the environmental environment, as the department presidency, the department council, and the scientific committee work to provide all requirements for the development of the department.

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
2023-2024 first semester Step one	MU0541101	Anatomy of the head and neck	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541102	Principles of chemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541103	Medical and optical physics 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541104	Biology 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541105	Computer principles 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541106	Human rights and democracy	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541107	English	optional	√	√	√	√	√	√	√	√	√	√	√	√

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				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	المعرفة				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2023-2024 second semester Step one+	MU0541201	Anatomy of the eye	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541202	Biochemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541203	Medical and optical physics 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541204	Biology 2	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541205	Computer principles 2	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0541206	Arabic	optional	√	√	√	√	√	√	√	√	√	√	√	√

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
2023-2024 first semester Step two	MU0542101	Philosophy of the eye and vision 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542102	Optical devices 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542103	Ocular health 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542104	Refractive errors 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542105	Statistical applications1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542106	Medical terms	optional	√	√	√	√	√	√	√	√	√	√	√	√

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
2023-2024 second semester Step two	MU0542101	Philosophy of the eye and vision 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542201	Optical devices 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542202	Ocular health 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542203	Refractive errors 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542204	Statistical applications 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542205	pharmaceutical	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU0542206	Lasers in ophthalmology	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
2023-2024 Step three	MU054301	Eye problems with internal and neurological diseases	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054302	Medical glasses 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054303	Strabismus 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054304	Refractive errors2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054305	computer applications	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054306	Eye problems with internal and neurological diseases	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	MU054307	Medical glasses 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√

	MU054308	**Strabismus 1**	**Basic**	√	√	√	√	√	√	√	√	√	√	√	√

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