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:

<u>Academic Program Description</u>: 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.

<u>Program Mission</u>: 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.

<u>Curriculum Structure</u>: 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.

<u>Teaching and learning strategies</u>: 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: 1/10/2023 File Completion Date: 15/2/2024

Signature: Head of Department Name: Dr. Zainb Abdalzahra abdalhsan 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: A.L Muhammad Farhan Kzar Date: 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 H	Credit Hours				
			the oretical	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	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	1- That the student knows the basics of the required sciences.
cadres with specialization.	2- That the student understands the required scientific details.
2- Operates and maintains the	3- The student should analyze scientific developments.
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.	
Skills	
1 - That the student uses the	1-Good knowledge of the principles of optics and related sciences.
devices correctly.	2 - Technical ability in his field of work and monitoring the patient's
2-That the student applies	vital conditions.
what he has learned in	
practice.	
1 - The student must bring the	1- Good knowledge of medical terminology.
necessary materials.	

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

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 S F		Special Requirements (if applicab	/Skills le)	Number of the teaching staff							
	General	Special			Staff	Lecturer						
Prof. Dr. Yassin Hassan Kazem	physics	Optical physics			Yes							
L.D Enas Reda Ali	mathematics	Applied mathematics			Yes							

Dr. Amir Muhammad	ophthalmology	Corneal	Yes	
наст		transpiant		
Dr. Ali Hussein Hamza	doctor	Ear, Nose and Throat	Yes	
Dr. Ghaith Ali Mahmoud	Medicine	Eye diseases and surgery		Yes
Dr. Hossam Al-Humairi	Ophthalmologist	Higher Diploma in Retina		
M. M. Marwa Bassem Mahan	business management	Financial management	Yes	
A.L. Muhammad Qasim Abis	Information technology engineering	Information systems management	Yes	
A. L Hala Mohamed Sobhi	Laser physics	Laserphysics	Yes	
A.L. Muhaymen Samir Arif	Optical technician	Diabetic retina	Yes	
A.L. Alaa Muhammad Abdel Abbas	Optical technician	squint	Yes	
A.L.Nour Khamis Hamad	Optical technician	squint	Yes	
A.L. Ali Hadi Maidi	Optical technician	squint	Yes	
A.L IbrahimSaad	Law	International law		Yes
A.L. Marwan Hisham Muhammad	Optical technician	squint	Yes	
Tamara Nihad Abbas	Medical physics	Medical physics	Yes	
Hanin Haider Hussein	Medical physics	Medical physics	Yes	
Zainab Ahmed Abbas	physics	physics	Yes	
Safa Amer Khalil	Life sciences	Microbiology		Yes
Nabaa Yassein Hussain	Medical physics	Medical physics		Yes
Mustafa Montada Khalaf	Information Technology	Multimedia Sciences	Yes	

Hawraa Sadiq Tel	Biology	Biology		Yes	
			1		

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.



			Pro	gram	Skills	s Outl	ine								
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic	Kno	wledge)		Skill	S			Ethics			
			or optional	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	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark	\checkmark		V	V
	MU0541102	Principles of chemistry	Basic				\checkmark		\checkmark	\checkmark				\checkmark	
	MU0541103	Medical and optical physics 1	optional		V	\checkmark	V		\checkmark	V	\checkmark	\checkmark	V	V	\checkmark
	MU0541104	Biology 1	optional			\checkmark	\checkmark	\checkmark	\checkmark			\checkmark		V	
	MU0541105	Computer principles 1	optional				\checkmark		V	\checkmark		V		\checkmark	V
	MU0541106	Human rights and democracy	optional			V	\checkmark	V		V			V	V	V
	MU0541107	English	optional	$\overline{\mathbf{v}}$		\checkmark		\checkmark	\checkmark			\checkmark		V	

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		Required program Learning outcomes													
Year/Level	Course Code	Course Name	Basic	لمعرفة]			Skill	S			Ethics			
	2023-2024	or optional	or optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	С3	C4
2023-2024 second	MU0541201	Anatomy of the eye	Basic		V	\checkmark	\checkmark						V		
semester	MU0541202	Biochemistry	Basic	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark						
Step one+	MU0541203	Medical and optical physics 2	Basic	\checkmark	V	V	\checkmark	\checkmark	V		\checkmark	V	V	V	\checkmark
	MU0541204	Biology 2	optional	V					V			N	Ń	V	\checkmark
	MU0541205	Computer principles 2	optional			\checkmark						\checkmark	\checkmark		\checkmark
	MU0541206	Arabic	optional		\checkmark		\checkmark			\checkmark		\checkmark	\checkmark		V



	Program Skills Outline														
					Requ				progr	am Lo	earnin	goutcon	nes		
			Basic		Know	ledge	l		Sk	ills			Eth	nics	
Year/Level Course Cours	Course Code	e Course Name	or optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
	MU0542101	Philosophyof the eye and vision 1	Basic			\checkmark	\checkmark			\checkmark	\checkmark	\checkmark			\checkmark
	MU0542102	Optical devices1	Basic				\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
2023-2024	MU0542103	Ocular health 1	Basic			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	
first semester	MU0542104	Refractive errors 1	Basic				\checkmark		\checkmark						
step two	MU0542105	Statistical applications1	optional				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
	MU0542106	Medical terms	optional	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	

Program Skills Outline															
	Required program Learning outcomes														
Year/Level	Course Code	Course Name	Basic		Know	•		Sk	ills		Ethics				
			or												
			option	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
			a												
2023-2024 second semester Step two	MU0542101	Philosophy of the eye and vision 2	Basic		\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	MU0542201	Optical devices 2	Basic				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
	MU0542202	Ocular health 2	Basic	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark						
	MU0542203	Refractive errors 2	Basic	\checkmark	\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	MU0542204	Statistical applications 2	Basic	\checkmark											
	MU0542205	pharmaceutical	Basic	\checkmark			\checkmark						\checkmark		\checkmark
	MU0542206	Lasers in ophthalmology	Basic	\checkmark		\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark



Program Skills Outline															
	Required program Learning outcomes														
Year/Level	Course Code	Course Name	Basic or optional		Know	Skills				Ethics					
				A1	A2	A3	A4	B1	B2	B 3	B4	C1	C2	С3	C4
	MU054301	Eye problems with internal and neurological diseases	Basic	V		\checkmark	\checkmark	\checkmark		\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark
	MU054302	Medicalglasses 1	Basic	\checkmark	\checkmark		\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	MU054303	Strabismus 1	Basic	\checkmark					\checkmark				\checkmark	\checkmark	\checkmark
2023-2024 Sten three	MU054304	Refractive errors2	Basic	\checkmark			\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
Step un ee	MU054305	computer applications	Basic	\checkmark	\checkmark		\checkmark			\checkmark		\checkmark		\checkmark	\checkmark
	MU054306	Eye problems with internal and neurological diseases	Basic			\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	MU054307	Medicalglasses 1	Basic		V			V		V		V	V		N

MU054308	Strabismus 1	Basic	\checkmark	\checkmark	\checkmark	 	 	\checkmark	\checkmark	 	