

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



**Sawa University  
College of Health and Medical Technologies Scientific  
Department of Optics Technique**

# **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: Sawa University

Faculty/Institute: College of Health and Medical Technologies

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: / /2024

File Completion Date: 28/1/2024

Signature:

Head of Department Name:

P. Hussein Muhammad

Date: / /2024

Signature:

Scientific Associate Name:

A.P.Dr . Safaa Mustafa Hamid

Date: 4/4/2024

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

17/4/2024

## **. 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.



<b>6. Program Description</b>				
<b>Year/Level</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Credit Hours</b>	
			<b>theoretical</b>	<b>Practical</b>
The first stage/first course		<b>Anatomy of the head and neck</b>	<b>2</b>	<b>5</b>
The first stage/first course		<b>Principles of chemistry</b>	<b>2</b>	<b>4</b>
The first stage/first course		<b>Medical and optical physics 1</b>	<b>3</b>	<b>5</b>
The first stage/first course		<b>Biology 1</b>	<b>2</b>	<b>4</b>
The first stage/first course		<b>Computer principles 1</b>	<b>1</b>	<b>2</b>
The first stage/first course		<b>Human rights and democracy</b>	<b>2</b>	<b>0</b>
The first stage/first course		<b>English</b>	<b>3</b>	<b>0</b>
First stage/second course		<b>Anatomy of the eye</b>	<b>2</b>	<b>5</b>
First stage/second course		<b>Biochemistry</b>	<b>2</b>	<b>4</b>
First stage/second course		<b>Medical and optical physics 2</b>	<b>3</b>	<b>5</b>
First stage/second course		<b>Biology 2</b>	<b>2</b>	<b>4</b>
First stage/second course		<b>Computer principles 2</b>	<b>1</b>	<b>2</b>
First stage/second course		<b>Arabic</b>	<b>2</b>	<b>0</b>
First stage/second course		<b>Baath Party crimes</b>	<b>2</b>	<b>0</b>
The second stage / first course		<b>Philosophy of the eye and vision 1</b>	<b>2</b>	<b>4</b>
The second stage / first course		<b>Optical devices 1</b>	<b>2</b>	<b>5</b>
The second stage / first course		<b>Ocular health 1</b>	<b>2</b>	<b>4</b>
The second stage / first course		<b>Refractive errors 1</b>	<b>2</b>	<b>5</b>
The second stage / first course		<b>Statistical applications1</b>	<b>1</b>	<b>3</b>
The second stage / first course		<b>Medical terms</b>	<b>2</b>	<b>0</b>
The second stage / second course		<b>Philosophy of the eye and vision 2</b>	<b>2</b>	<b>4</b>
The second stage / second course		<b>Optical devices 2</b>	<b>2</b>	<b>5</b>



The second stage / second course		<b>Ocular health 2</b>	<b>2</b>	<b>4</b>
The second stage / second course		<b>Refractive errors 2</b>	<b>2</b>	<b>5</b>
The second stage / second course		<b>Statistical applications 2</b>	<b>1</b>	<b>3</b>
The second stage / second course		<b>pharmaceutical</b>	<b>2</b>	<b>0</b>
The second stage / second course		<b>Lasers in ophthalmology</b>	<b>1</b>	<b>3</b>
The third stage		<b>Eye problems with internal and neurological diseases</b>	<b>1</b>	<b>3</b>
The third stage		<b>Medical glasses 1</b>	<b>2</b>	<b>4</b>
The third stage		<b>Strabismus 1</b>	<b>2</b>	<b>4</b>
The third stage		<b>Refractive errors2</b>	<b>2</b>	<b>4</b>
The third stage		<b>computer applications</b>	<b>1</b>	<b>2</b>
The third stage		<b>English</b>	<b>3</b>	<b>0</b>
The third stage		<b>Research methodology</b>	<b>2</b>	<b>0</b>
The third stage		<b>Optical devices2</b>	<b>2</b>	<b>4</b>
The fourth stage		<b>Eye diseases 2</b>	<b>2</b>	<b>2</b>
The fourth stage		<b>Strabismus 2</b>	<b>2</b>	<b>4</b>
The fourth stage		<b>Pediatric ophthalmology</b>	<b>1</b>	<b>2</b>
The fourth stage		<b>Glasses and contact lenses 2</b>	<b>2</b>	<b>4</b>
The fourth stage		<b>The project</b>	<b>0</b>	<b>6</b>
The fourth stage		<b>X-rays and ultrasound of the eye</b>	<b>1</b>	<b>2</b>
The fourth stage		<b>Ocular Prothesis2</b>	<b>2</b>	<b>4</b>

## 7. Expected learning outcomes of the program

### Knowledge

<p>1- Graduation of scientific cadres with specialization.</p> <p>2- Operates and maintains the medical equipment used in eye examination.</p> <p>3- Enabling students to obtain knowledge, intellectual understanding, and skills to identify vision testing devices and ways to maintain them.</p> <p>4- Teaching the student the skills required to deal with different cases of eye diseases.</p> <p>5- Enabling the student to contribute to understanding cases of eye disease and to intervene as necessary.</p>	<p>1- That the student knows the basics of the required sciences.</p> <p>2- That the student understands the required scientific details.</p> <p>3- The student should analyze scientific developments.</p>
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### Skills

<p>1 - That the student uses the devices correctly.</p> <p>2- That the student applies what he has learned in practice.</p>	<p>1- Good knowledge of the principles of optics and related sciences.</p> <p>2 - Technical ability in his field of work and monitoring the patient's vital conditions.</p>
<p>1 - The student must bring the necessary materials.</p>	<p>1- Good knowledge of medical terminology.</p> <p>2- Good knowledge of the English language.</p>
<p>2 - That the student performs the appropriate procedures for the situations he faces.</p>	

### 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.

Academic Rank	Specialization		Number of the teaching staff	
	General	Special	Staff	Lecturer
P. Hussian Mohammad Gatti	Agricultural Sciences	Food Sciences	Yes	
Dr. Muhammad Abdulaziz Al-Lawzi	Veterinary medicine	Transmissible diseases	Yes	
Dr. Ayman Mohammad Sobhy Hajjar	Clinical Laboratory Medicine	Parasitology & Microbiology	Yes	
A.L. Ruaa Jawad Jaber Tafar	pharmacy science	pharmacy science	Yes	
<b>A.L. Hussein Riyadh sultan Obeed</b>	<b>physics</b>	<b>Optical Phsics and Laser</b>	Yes	
A.L. zahraa mahdi mhaibes alkinani	optical technologies	medical optometry	Yes	
A.L. Hoda Nahi Tahayur	pharmacist	pharmacology & toxicology	Yes	
A.L. Zuhor Abdul Latif Thamer	Physics	Medical physics	Yes	
Dr. Iman Mustafa Shakir	Medicine	board ophthalmologist specialist doctors	Yes	
A.L. Ahmed Saad Kazem	<b>physics</b>	<b>Optical Phsics and Laser</b>	Yes	
A.L. Nour Ali Sayah	Veterinary medicine	Transmissible diseases	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		Anatomy of the head and neck	Basic	√	√	√	√	√	√	√	√	√	√	√	
		Principles of chemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	
		Medical and optical physics 1	optional	√	√	√	√	√	√	√	√	√	√	√	
		Biology 1	optional	√	√	√	√	√	√	√	√	√	√	√	
		Computer principles 1	optional	√	√	√	√	√	√	√	√	√	√	√	
		Human rights and democracy	optional	√	√	√	√	√	√	√	√	√	√	√	
		English	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 one+		Anatomy of the eye	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Biochemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Medical and optical physics 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Biology 2	optional	√	√	√	√	√	√	√	√	√	√	√	√
		Computer principles 2	optional	√	√	√	√	√	√	√	√	√	√	√	√
		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		Philosophy of the eye and vision 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Optical devices 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Ocular health 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Refractive errors 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Statistical applications1	optional	√	√	√	√	√	√	√	√	√	√	√	√
		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		Philosophy of the eye and vision 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Optical devices 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Ocular health 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Refractive errors 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		Statistical applications 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		pharmaceutical	Basic	√	√	√	√	√	√	√	√	√	√	√	√
		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
<b>2023-2024 Step three</b>		<b>Eye problems with internal and neurological diseases</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>Medical glasses 1</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>Strabismus 1</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>Refractive errors2</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>computer applications</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>Eye problems with internal and neurological diseases</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√
		<b>Medical glasses 1</b>	<b>Basic</b>	√	√	√	√	√	√	√	√	√	√	√	√



## Course Description Form

<b>1. Course Name:</b>	
Parasitology	
<b>2. Course Code:</b>	
<b>3. Semester / Year:</b>	
Semester 1	
<b>4. Description Preparation Date:</b>	
2023-2024	
<b>5. Available Attendance Forms</b>	
: Daily attendance	
<b>6. Number of Credit Hours (Total) / Number of Units (Total):</b>	
2 hours (theoretical) + 2 hours (practical) / 6 units	
<b>7. Course administrator's name (mention all, if more than one name)</b>	
Name: Assist. Pro.dr. Hasan Raheem Khudhur Email: <a href="mailto:hasan.raheem.k@sawauniversity.edu.iq">hasan.raheem.k@sawauniversity.edu.iq</a>	
<b>8. Course Objectives</b>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>1- Identify the external appearance, life cycle, pathogenicity, and laboratory. Diagnose all parasites of medical importance.</li> <li>2- Identify the epidemiology of parasites, with special reference to those endemic in Iraq.</li> </ul>
<b>9. Teaching and Learning Strategies</b>	
<b>Strategy</b>	1- Lecture, use of the blackboard and presentation 2- Demonstration (using graphs, pictures and educational films using a data projector) 3- Interactive discussion 4- Self-education

10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	knowledge	Terms and definitions in parasitology.	-Lecture, use of the blackboard and presentation -Demonstration (using graphs, pictures and educational films using a data projector) -Interactive discussion -Self-education - Open educational classes using the Classroom platform	Theoretical, practical/oral and written examinations (daily, monthly and midterm exam) and scientific reports

2	4	knowledge	Introduction to protozoology.	====	====
3	4	knowledge	Sacodina, Entamoeba histolytica.	====	====
4	4	knowledge	Entamoeba coli	====	====
5	4	knowledge	Small amoeba: Endolimax nana Iodamoeba butschlii.	====	====
6	4	knowledge	Mastigophora,	====	====
7	4	knowledge	Trichomonas.	====	====
8	4	knowledge	Heamo- flagellates( blood & tissue flagellates),	====	====
9	4	knowledge	Genus Trypanosoma,	=====	====
10	4	knowledge	Ciliophora: Blantidium coli	=====	====
11	4	knowledge	Genus plasmodium.	====	====
12	4	knowledge	P.falciparum, P. vivax, P ovale, P. malarae	====	====
13	4	knowledge	General discussion on malarial parasites	====	====
14	4	knowledge	Isopora,	====	====
15	4	knowledge	Cryptosporidiadse Genus cryptosporidium,	====	====

### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

40 marks (5 marks for the first monthly exam + 5 marks for the second monthly exam + 15 marks for the midterm exam) + 5 marks for daily preparation and daily tests + 5 marks for the first practical exam + 5 marks for the second monthly practical exam)

60 marks (20 marks final practical exam + 40 marks final theoretical exam)

### 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	not available
Main references (sources)	Paniker's Textbook of Medical Parasitology Butel, Janet Mc Stephen ,2015
Electronic References, Websites	Websites available on Google Chrome





