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

Academic Program Description
Department of Optics Technology
College of Health and Medical Technology
Al-Farabi University

2024

Academic Program Description

University Name: Al-Farabi 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: 2025-2024

File Completion Date: 30/6/2025

Date: 20/7/2025

Signature:

Head of Department Name:

Prof, Dr. Mahdi Hasan Suhail

The file is checked by: Dr. Alaa Tareq

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Sign:

Date: July 20th, 2025

Signature:

Scientific Associate Name: Athmar. W Hussein

Date:

Approval of the Dean

1. Program Vision

- **in the field of vision care at the local and regional levels, and to contribute to the preparation of technical competencies capable of innovation and providing advanced optical services that improve the quality of healthy life in society.**

2. Program Mission

The Department of Medical Optics Technology at the College of Health and Medical Technology at Al-Farabi University seeks to prepare technical personnel who are scientifically and professionally qualified in the field of eye examination and diagnosis techniques. This is achieved through an interactive educational environment, modern curricula, and advanced practical training. This focus is placed on scientific research, community service, and contributing to the development of the ophthalmic healthcare system in Iraq.

3. Program Objectives

- **Preparing qualified technical personnel in the field of medical optics, capable of practicing the profession with high efficiency and equipped with the necessary theoretical knowledge and clinical and technical skills. Developing educational and training curricula to keep pace with scientific and technological advances in optics technologies and modern medical devices. Promoting a culture of applied scientific research and encouraging faculty and students to produce research that serves the specialty and contributes to the development of ophthalmic healthcare. Activating the department's role in serving the community by organizing free eye examination campaigns, health awareness programs, and cooperation with local health institutions. Establishing scientific and professional partnerships with hospitals, optical centers, and reputable universities, both locally and internationally, to exchange expertise and enhance training and employment opportunities. Providing a modern and stimulating educational environment based on interactive learning, e-learning, and practical training using the latest technologies and equipment. Instilling professional and ethical values in students and promoting the principles of teamwork, respect for patient privacy, and social responsibility. Achieving national and international academic accreditation standards through the implementation of comprehensive quality systems and continuous performance evaluation of students and faculty. Contributing to sustainable development by adopting healthy, safe, and environmentally friendly practices within the department, in line with the United Nations Sustainable Development Goals.**

4. Program Accreditation

Not yet programmatically accredited

5. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	2	4	10%	Basic
College Requirements	3	6	20%	Basic
Department Requirements	182	46	60%	Basic
Summer Training	2	4	10%	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	Opt 1.1	Anatomy of the head and neck	5	2
The first stage/first course	Opt 1.2	Chemistry principles	4	2
The first stage/first course	Opt 1.3.1	Medical and optical physics 1	5	3
The first stage/first course	Opt 1.4.1	Biology 1	4	2
The first stage/first course	Opt 1.5.1	Computer principles 1	2	1
The first stage/first course	Opt 1.6	Human rights and democracy	0	2
The first stage/first course	Opt 1.7	English language	0	2
First tage/second course	Opt 1.8	Anatomy of the eye	5	2
First stage/second course	Opt 1.9	Biochemistry	4	2
First tage/second course	Opt 1.3.2	Medical and optical physics 2	5	3
First stage/second	Opt 1.4.2	Biology 2	4	2

course				
First tage/second course	**Opt 1.5.2**	**Computer principles** 2	**2**	**1**
First stage/second course	**Opt 1.10**	**Arabic language**	**0**	**2**
The second stage / first course	**Opt 2.1.1**	**Physiology of the eye and vision1**	**4**	**2**
The second stage / first course	**Opt 2.2.1**	**Optical Equipment1**	**5**	**2**
The second stage / first course	**Opt 2.3.1**	**Eye health1**	**4**	**2**
The second stage / first course	**Opt 2.4.1**	**Refractive errors1**	**5**	**2**
The second stage / first course	**Opt 2.5.1**	**Statistical applications 1**	**3**	**1**
The second stage / first course	**Opt 2.6**	**Medical terminology**	**0**	**2**
The second stage / second course	**Opt 2.7**	**Physiology of the eye and vision**2	**0**	**2**
The second stage / second course	**Opt 2.1.2**	**Physiology of the eye and vision**2	**4**	**2**
The second stage / second course	**Opt 2.2.2**	**Optical Equipment**2	**5**	**2**
The second stage / second course	**Opt 2.3.2**	**Eye health**2	**4**	**2**
The second stage / second course	**Opt 2.4.2**	**Refractive errors**2	**5**	**2**
The second stage / second course	**Opt 2.5.2**	**Statistical applications** 2	**3**	**1**
The second stage / second course	**Opt 2.8**	**Pharmacology**	**0**	**2**
The second stage / second course	**Opt 2.9**	**Laser in ophthalmology**	**3**	**1**
The third stage//first stage	**Opt 3. 1**	**Optical Equipment**2	**4**	**2**
The third stage//first stage	**Opt3.2 2**	**Eye health**2	**5**	**2**
The third stage//first stage	**Opt 3 .3.2**	**Refractive errors**2	**4**	**2**

The third stage//first stage	**Opt3.3.1**	**Statistical applications** 2	**5**	**2**
The third stage//first stage	**Opt3.9**	**Pharmacology**	**3**	**1**
The third stage//first stage	**Opt3.6**	**Laser in ophthalmology**	**0**	**2**
The third stage//first stage	**Opt3.8**	**Ocular manifestation of system diseases1**	**3**	**1**
The third stage /second stage	**Opt 3. 1.1**	**Prescription eyeglasses1**	**3**	**1**
The third stage/second stage	**Opt3.3.2.1**	**Squint1**	**4**	**2**
The third stage/second stage	**Opt 3.3.3**	**Refractive errors3**	**4**	**1**
The third stage/second stage	**Opt3.3..11**	**Optical Equipment3**	**4**	**2**
The third stage/second stage	**Opt3.9,1**	**Treatment of ocular diseases by laser**	**4**	**2**
The third stage/second stage	**Opt3.8.1**	**Computer Applications 1**	**2**	**1**
The third stage/second stage	**Opt3.5**	**Ethics**	**0**	**2**

The fourth stage	**Opt 4.1**	**Eye disease**	**3**	2
The fourth stage	**Opt 4.2**	**Squint 2**	**4**	**2**
The fourth stage	**Opt 4.3**	**Pediatric Ophthalmology**	**4**	2
The fourth stage	**Opt 4.4**	**(Glasses and contact lenses 2**	**4**	**2**
The fourth stage	**Opt 4.5**	**For eye alternatives ١**	**4**	**2**
The fourth stage	**Opt 4.6**	**Eye X-rays and ultrasound**	4	2
The fourth stage	**Opt 4.7**	**project**	-	-
The fourth stage	**Opt 4.8**	**workshop**	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- 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
2 prf, Dr,	Physics physics	Thin films applications materials			Yes	
1 Assit.prof.Dr.	physics	laser			Yes	
3 lectures Dr.	Laser physics biophysics	Laser physics			Yes	
5- Bachelor techniques	Optical technician Medical physics	Diabetic retina				yes
1					Yes	

Professional Development

Mentoring new faculty members

Today, the department comprises a distinguished teaching staff consisting of holders of advanced academic degrees, specializing in optics, medical physics, optical anatomy, and optical measurements. This is in addition to young talents who contribute to modernizing teaching methods and keeping pace with technological developments. The department's infrastructure features fully equipped laboratories with the latest optical equipment, such as: • Refraction and aberration testing devices • Training units for the use of contact lenses and eyeglasses • Lens and cutting and fitting techniques laboratory • Visual field and night vision analysis devices

Professional development of faculty members

The strategic plan for the Department of Medical Optics Technology is based on an ambitious institutional vision aimed at academic excellence and effective contribution to the healthcare sector. This is achieved by preparing specialized technical personnel with the scientific and clinical skills necessary to keep pace with developments in the field of medical optics. This plan was developed based on an analysis of the department's internal and external environment using a model to identify strengths, weaknesses, opportunities, and challenges, with a focus on aligning the department's objectives with the vision and mission of the college and university The plan includes key strategic pillars, including: Developing academic curricula in line with international standards.

1. Enhancing infrastructure with modern laboratories and equipment.
2. Improving the efficiency of teaching and technical staff through ongoing training programs.
3. Promoting scientific research in the field of medical optics and modern technologies.

11. Acceptance Criterion

As for admission, it is through central admissions. 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.

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
2024-2025 first semester Step one	Opt 1.1	Anatomy of the head and neck	Basic	√	√			√	√	√		√	√	√	√
	Opt 1.2	Chemistry principles	Basic	√	√	√						√	√	√	√
	Opt 1.3.1	Medical and optical physics 1	optional	√	√							√	√	√	√
	Opt 1.4.1	Biology 1	optional	√	√							√	√	√	√
	Opt 1.5.1	Computer principles 1	optional	√	√							√	√	√	√
	Opt 1.6	Human rights and democracy	optional	√	√							√	√	√	√
	Opt 1.7	English language	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
f2024-2025 irst semester Step two	Opt 1.8	Anatomy of the eye	Basic	√	√							√	√	√	√
	Opt 1.9	Biochemistry	Basic	√	√							√	√	√	√
	Opt 1.3.2	Medical and optical physics 2	Basic	√	√	√						√	√	√	√
	Opt 1.4.2	Biology 2	optional	√	√							√	√	√	√
	Opt 1.5.2	Computer principles 2	optional	√	√							√	√	√	√
	Opt 1.10	Arabic language	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
2024-2025 Second semester Step two	Opt 2.1.1	Physiology of the eye and vision1	Basic	√	√							√	√	√	√
	Opt 2.2.1	Optical Equipment1	Basic	√	√							√	√	√	√
	Opt 2.3.1	Eye health1	Basic	√	√							√	√	√	√
	Opt 2.4.1	Refractive errors1	Basic	√	√							√	√	√	√
	Opt 2.5.1	Statistical applications 1	optional	√	√	√						√	√	√	√
	Opt 2.6	Medical terminology	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
2024-2025 second semester Step two	Opt 2.1.2	Physiology of the eye and vision2	Basic	√	√							√	√	√	√
	Opt 2.2.2	Optical Equipment2	Basic	√	√							√	√	√	√
	Opt 2.3.2	Eye health2	Basic	√	√							√	√	√	√
	Opt 2.4.2	Refractive errors2	Basic	√	√							√	√	√	√
	Opt 2.5.2	Statistical applications 2	Basic	√	√	√						√	√	√	√
	Opt 2.8	Pharmacology	Basic	√	√							√	√	√	√
	Opt 2.9	Laser 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
2024-2025 Step three	Opt 2.1.1	Physiology of the eye and vision1	Basic	√	√							√	√	√	√
	Opt 2.2.1	Optical Equipment1	Basic	√	√							√	√	√	√
	Opt 2.3.1	Eye health1	Basic	√	√							√	√	√	√
	Opt 2.4.1	Refractive errors1	Basic	√	√							√	√	√	√
	Opt 2.5.1	Statistical applications 1	Basic	√	√							√	√	√	√
	Opt 2.6	Medical terminology	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
	Opt 2.1.1	Physiology of the eye and vision1	Basic	√	√							√	√	√	√

2024-2025 Step three	**Opt 2.2.1**	**Optical Equipment1**	**Basic**	√	√							√	√	√	√
	Opt 2.3.1	**Eye health1**	**Basic**	√	√							√	√	√	√
	Opt 2.4.1	**Refractive errors1**	**Basic**	√	√							√	√	√	√
	Opt 2.5.1	**Statistical applications 1**	**Basic**	√	√							√	√	√	√
	Opt 2.6	**Medical terminology**	**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**
2024-2025 Step fourth	**Opt 4.1**	**Eye disease**	**Basic**	√	√							√	√	√	√
	Opt 4.2	**Squint 2**	**Basic**	√	√							√	√	√	√
	Opt 4.3	**Pediatric Ophthalmology**	**Basic**	√	√							√	√	√	√
	Opt 4.4	**(Glasses and contact lenses 2**	**Basic**	√	√							√	√	√	√
	Opt 4.5	**For eye alternatives**	**Basic**	√	√							√	√	√	√
	Opt 4.6	**Eye X-rays and ultrasound**	**Basic**	√	√							√	√	√	√
	Opt 4.7	**project**	**Basic**	√	√	√						√	√	√	√
	Opt 4.8	**workshop**		√	√							√	√	√	√

	Optic5.9	English language		√	√							√	√	√	√

1. Course Name:

Laser in Ophthalmology

2. Course Code:

opt2.9

3. Semester / Year:

One semester

4. Description Preparation Date:

16-7-2025

5. Available Attendance Forms:

Internet & In class

6. Number of Credit Hours (Total):

7. Number of Units (Total):

4 Hours

2 Units

8. Course administrator's name (mention all, if more than one name)

Name: Asst. lect. Tabarak Ammar Sabah

tabarak.amar1204a@sc.uobaghdad.edu.iq

9. Course Objectives

The student should be familiar with the important applications of laser beams used in eye examination and treatment.

10. Teaching and Learning Strategies

Strategy	**Learn about eye diseases, their causes, and how to use various laser devices to treat damag to the retina, optic nerve, and other parts of the eye.**

11. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	To enable the student	Lasers: definition, characteristics, applications in eye	Lectures, discussions,	Conducting monthly

2			Laser in medicine: Advantage, disadvantage		
3			Types of medical lasers: Excimer lasers (LASIK), and Double frequency Nd: YAG laser		
4			Micro-pulse laser		
5			Femtosecond laser		
6			Laser Safety		
7			Laser tissue interaction		
8			Laser tissue interaction		
9			Laser in diagnostics (OCT)		
10			Confocal scanning laser ophthalmoscopy (CSLO)		
11			Laser Doppler flowmetry (LDF)		
12			Photo Refractive keratectomy (PRK)		
13			Laser treatment for eyes (tissues and diseases)		
14			Retinal Laser treatment		
15			Revision		

12. Course Evaluation

Quizzes 5
Assignments 5
Projects / Report 5
Midterm Exam 10
Lab. 15
Final practical exam25
Final Exam 35

13. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Essentials in Ophthalmology**
Main references (sources)	**Visual and related disorders in children**
Recommended books and references (scientific journals, reports...)	**Opticians Guide**
Electronic References, Websites	

Course Description

14. Course Name:
Refractive Errors 4
15. Course Code:
Opt 3.4
16. Semester / Year:
Two Semester
17. Description Preparation Date:
16-7-2025
18. Available Attendance Forms:
Internet & In class
19. Number of Credit Hours (Total): **20. Number of Units (Total):**
6 Hours **8 Units**
21. Course administrator's name (mention all, if more than one name)
Name: Asst. lect. Tabarak Ammar Sabah **tabarak.amar1204a@sc.uobaghdad.edu.iq**
22. Course Objectives
Identify types of visual defects, diagnose refractive errors, and treat them.
23. Teaching and Learning Strategies

Strategy	**Learn about eye conditions, their causes, and how to use various eye examination devices to collect data, images, and diagrams for each eye condition, leading to the preparation of a report on the examination results so that the ophthalmologist can prescribe the necessary medication or suggest surgery for cases that require it.**

24. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	To enable	Muscle anomalies	Lectures,	Conducting

2			Red eye		
3			Convergence with accommodation		
4			Mechanism of accommodation		
5			Spasm of accommodation		
6			Paralysis of accommodation		
7			Variation of accommodation with age		
8			Color blindness		
9			Treatment of refractive errors		
10			Treatment of refractive errors		
11			Writing prescription		
12			Writing prescription		
13			Strabismus in children		
14			Injuries of the eye		
15			transposition		

25. Course Evaluation

Quizzes 5
Assignments 5
Projects / Report 5
Midterm Exam 10
Lab. 15
Final practical exam25
Final Exam 35

26. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Ophthalmic Optics**
Main references (sources)	**The eyes and visual Optical instruments**
Recommended books and references (scientific journals, reports...)	**Optics of the human eyes**
Electronic References, Websites	**Optics and optical instruments: An Introduction**

Course Description

27. Course Name:
Refractive Errors 3
28. Course Code:
Opt 3.4
29. Semester / Year:
Two Semester
30. Description Preparation Date:
16-7-2025
31. Available Attendance Forms:
Internet & In class
32. Number of Credit Hours (Total): **33. Number of Units (Total):**
6 Hours **8 Units**
34. Course administrator's name (mention all, if more than one name)
Name: Asst. lect. Tabarak Ammar Sabah **tabarak.amar1204a@sc.uobaghdad.edu.iq**
35. Course Objectives
Identify types of visual defects, diagnose refractive errors, and treat them.
36. Teaching and Learning Strategies

Strategy	**Learn about eye conditions, their causes, and how to use various eye examination devices to collect data, images, and diagrams for each eye condition, leading to the preparation of a report on the examination results so that the ophthalmologist can prescribe the necessary medication or suggest surgery for cases that require it.**

37. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	To enable	Introduction	Lectures,	Conducting

2			Refraction of the eye		
3			Near point		
4			Far point		
5			Mechanism of accommodation		
6			Spasm of accommodation		
7			Paralysis of accommodation		
8			Compound myopia		
9			Accommodation with myopia		
10			Correction of myopia with medical lenses		
11			Etiology of Hypermetropia		
12			Sign and symptoms of Hypermetropia		
13			Types of Hypermetropia		
14			Manifest hypermetropia		
15			Treatment of Hypermetropia		

38. Course Evaluation

Quizzes 5
Assignments 5
Projects / Report 5
Midterm Exam 10
Lab. 15
Final practical exam25
Final Exam 35

39. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Ophthalmic Optics**
Main references (sources)	**The eyes and visual Optical instruments**
Recommended books and references (scientific journals, reports...)	**Optics of the human eyes**
Electronic References, Websites	**Optics and optical instruments: An Introduction**

Course Description Form

1. Course Name:	
English Language	
2. Course Code:	
Opt 4.9	
3. Semester / Year:	
2024-2025	
4. Description Preparation Date:	
16/7/2025	
5. Available Attendance Forms:	
In-person lectures	
6. Number of Credit Hours (Total) / Number of Units (Total)	
One hour/ two units	
7. Course administrator's name (mention all, if more than one name)	
Name: Asst. Lect. Sarah Najah Hasan **Email: sarra.najah@alfarabiuc.edu.iq**	
8. Course Objectives	
Course Objectives: the student will be familiar with the basic vocabulary of English language used in preparing and studying academic curricula.	**The students will be familiar to read and write in a foreign language, whic will in turn help them study and comprehe other academic subjects.**
9. Teaching and Learning Strategies	
Strategy	**Identifying the basics of English language, how to construct simple sentences, in addition to learning some basic vocabulary used in daily life.**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1&2 3&4 5&6 7&8 9&10 11&12	1	Improvement of understanding the basics of understanding language and how to acquire it and learn it through simple methods	1- Cardinal numbers, years, prices, times. 2- Phonetics, alphabet letters, pronunciation 3- Countries, capitals, arrange wor arrange letters 4- Simple prese verb to Be 5- Simple prese verb to Do 6- Simple prese verb to Have 7- Simple prese ordinary verbs	Interactive lectures	Written exams assignments

13&14 **15&16** **17&18** **19&20** **21&22** **23&24** **25&26** **27&28** **29&30**			**8- Tag questi and short answers** **9- Review** **10- Question word** **11- Abbreviation, adjectives** **12- Plural nouns** **13- Possession** **14- Pronunciation** **15- Pronouns**		

11. Course Evaluation	
1. Interactive Assessment (dialogue) (5) **2. Personal Assessment (homework) (5)** **3. Midterm Exam (20)** **4. Final Exam (70)**	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if an	**New headway plus, upper-intermediate student's book and workbook**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

13. Course Name:

Ocular prosthesis

14. Course Code:

Opt,4.5

15. Semester / Year:

Year: courses

16. Description Preparation Date:

15-7-2025

17. Available Attendance Forms:

Weekly in class

18. Number of Credit Hours (Total) / Number of Units (Total)

No. of hours / 6 no. of units / 8

19. Course administrator's name (mention all, if more than one name)

Name: A.L. Rand haidar sadik abo alward
Email: rand.aboalward@alfarabiuc.edu.iq

20. Course Objectives

Course Objectives	**Aims to provide the student with cognitive skills about the concept, specifications, and importance of material alternatives (prosthetic eyes), how create and use them by the patient, and to study the properties of the materia used in the manufacturing process.**

21. Teaching and Learning Strategies

Strategy	**A- Cognitive Objectives** **1. The course aims to enable the student to understand the process of making an artificial eye in all its parts.** **2. To gain knowledge on the possibility of applying the fabrication process ar testing it on a patient's eye.** **3. To become familiar with the parts of the eye, the techniques, and the materials used in making an artificial eye.** **B- Skill Objectives ‘** **1. The ability to develop scientific research and apply it practically in laboratories specialized in creating artificial eyes.** **2. To distinguish the graduate with the skill of making an artificial eye in all i parts and in various cases and pathological deformities.** **Educational strategies include:** **1- Lecture method** **2- Discussion method** **3- Use of illustrative and practical examples and explanatory videos** **4- Reports and research** **5- Feedback from students** **6- Questions during lectures** **7- Reports and studies** **8- Examinations of various types.**

22. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	The anatomy of the face		review	
2	6	The eye			Whiteboard and screen
3	6	Types of damages			
4	6	Types of eye damages (2)			
5	6	Patient assessment for artificial eye			
6	6	Materials used for ocular prosthesis(1)			
7	6	Materials used for ocular prosthesis(2)			
8	6	Ocular prosthesis			
9	6	The impression method			
10	6	Iris production			
11	6	How to flask the eye wax pattern.			
12	6	Waxing of the eye			
13	6	Problems of ocular prosthesis			
14	6	Success of ocular prosthesis			
15	6	Trying eye prosthesis by insertion and removing			

23. Course Evaluation

1 Interactive assessment (live dialogue) (5)
2 Personal evaluation (homework) (5)
3 Periodic written tests (10)
4 Semester exams (40), including theoretical and practical
5 Final exams (60), including theoretical (35) and practical (25)

24. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Clinical ocular prosthetic by Kieth R.Pine Robert.J. Jacobs and Brain.H.slaon
Recommended books and references (scientific journals, reports...)	Scientific journals in the field
Electronic References, Websites	Specialized websites and the Google search engine

Course Description

25. Course Name:					
English language					
26. Course Code:					
Opt 1.7					
27. Semester / Year:					
1st semester: 2024/2025					
28. Description Preparation Date:					
16/7/2025					
29. Available Attendance Forms:					
In-person lectures					
30. Number of Credit Hours (Total) / Number of Units (Total)					
One hour/ two units					
31. Course administrator's name (mention all, if more than one name)					
Name: Asst. lect. Sarah Najah Hasan **Email: sarra.najah@alfarabiuc.edu.iq**					
32. Course Objectives					
Course Objectives: the student will be familiar with the basic vocabulary of English language used in preparing and studying academic curricula.			**The students will be familiar to read and write in a foreign language, whic will in turn help them study and comprehe other academic subjects**		
33. Teaching and Learning Strategies					
Strategy	**Identifying the basics of English language, how to construct simple sentences, in addition to learning some basic vocabulary used in daily life.**				
34. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1 **2** **3**	**1**	**Improvement of understanding the basics of understanding language and how to acquire it and learn it through simple**	**1- Cardinal numbers years, prices, times.** **2- Phonetics, alphabet letters, pronunciation** **3- Countries, capit arrange words, arra letters**	**Interactive lectures**	**Written exams assignments**

4 5 6 7 8 9 10 11 12 13 14 15		methods	4- Simple present, v to Be 5- Simple present, v to Do 6- Simple present, v to Have 7- Simple prese ordinary verbs 8- Tag questions a short answers 9- Review 10- Question words 11- Abbreviation, adjectives 12- Plural nouns 13- Possession 14- Pronunciation 15- Pronouns		

35. Course Evaluation
1. **Interactive Assessment (dialogue) (5)** 2. **Personal Assessment (homework) (5)** 3. **Midterm Exam (20)** 4. **Final Exam (70)**

36. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	**New headway plus for beginners, student's book and workbook**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description

1. Course Name:
Medical and Optical Physics 1
2. Course Code:
Optic1.3.1
3. Semester / Year:
First/ 2024-2025
4. Description Preparation Date:
30/6/2025
5. Available Attendance Forms:
Internet+ in class
6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours/ 4 units
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Fadhil Abbas Umran Email: fadhil.abbas@alfarabiuc.edu.iq
8. Course Objectives

Course Objectives	**Studying Electromagnetic spectrum(EM), the light, reflection and refraction.besides the lenses (concave and conve and the curved mirrors with their functions**
9. Teaching and Learning Strategies	
Strategy	Studying the light and EM spectrum, the reflection, and refraction. The curv mirror and the geometrical lenses and their function.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		Light and vision: introduction; light waves; light velocity; light rays and beams; electromagnetic spectrum.	review	The bord and the screen

					=
2	2		Reflection: definition; Reflection at plan surfaces; regular Reflection; ir regular reflection image formation by plane mirror; direction of image seen by eye. Refractive in		= =
3	2		Lenses: definition; focal length; lens power; types focal point. Thin lenses formula.		=
4	2		Examples and tutorials.		=
5	2		Notation: aberration. (Define, type)		=
6	2		Mirror (definition; focal length, type)		=
7	2		Refraction: definition; Refraction index total internal Reflection, critical angel.		= =
8	2		Reflection at curved mirror, spherical mirror, type of spherical mirror, rays' diagram for a concave and convex		=
9	2		Magnification, mirror equation, examples		=
10	2		Dispersion and the visible spectrum.		=
11	2		Polarization: definition; types.		=
12	2		Diffraction: definition; concept; grating; mechanism; constructive. And destructive.		=
13	2		Prism (dispersion)		=
14	2		Eye: definition; parts; focusing element; photoreceptors cells; accommodation.		=

15	2		Real &the apparent depth		=

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

Quizzes 5- Assignments 5- - Midterm Exam +Lab 30 - Final Exam 60

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	COLLEGE PHYSICS by RAYMOND A. SERWAY
Main references (sources)	HANDBOOK OF OPTICS
Recommended books and references (scientific journals, reports…)	Introduction to modern physics by fowles
Electronic References, Websites	Wekipidia