Course Description / Level Four

Eye Diseases	**Course name -1**
OPT 402	**Course code -2**
First Semester 2026/2027	**Semester/Year -3**
1/9/2025	**Date of preparation of the -4 description**
Practical and face-to-face lectures	**Available forms of -5 attendance**
30 theoretical hours + 45 practical hours 2 units	**/ Number of credit hours (total) -6 Number of units (total)**
	Name of the course supervisor -7 mention all names, if there is more) (than one name

Course objectives -8

The course aims to provide students with a comprehensive understanding of various eye diseases, their symptoms, and methods of management. This is achieved through an expanded study of pathological cases and appropriate diagnostic techniques, training students in proper guidance and counseling, and equipping them with the ability to refer patients to specialists for appropriate healthcare in accordance with professional and ethical standards.

Teaching and learning strategies -9

The course relies on **interactive lectures** supported by clinical images and illustrative presentations, alongside the **discussion of real pathological cases** to apply theoretical concepts in practice. It also encourages **self-**

directed learning through reports, seminars, and the review of recent scientific literature
. B. Course specific skill objectives The student will be able to **perform clinical eye examinations** and **diagnose common conditions** using appropriate instruments and tools. They will further develop the ability to **analyze and connect practical findings with theoretical knowledge**, in addition to enhancing their skills in **preparing scientific reports and engaging in professional medical communication**.
Teaching and learning methods
In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects **. Scientific visits and practical training in hospitals by specialized medical staff**
Evaluation methods
Daily tests, semester exams, final exams, weekly reports on the subject seminars on the study subjects , discussions and conversations during the . lesson
C. Affective and value- based goals Providing students with a deep knowledge and understanding of how laser technologies work in the field of vision care, appreciating their role in improving visual acuity, emphasizing the importance of precision and sensitive patient .care, and building high ethical and professional values in them
(In-person lectures), summer and professional training, graduation projects . field visits, and practical training in clinical subjects
• **Evaluation methods**
Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital

D. General and transferable skills (other skills related to employability and . (personal development

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Diseases of the orbit (infection)	Knowledge & Application	2 theory + 3 practical	the first
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Diseases of the eye lids (infections: viral, bacterial, allergic)	Knowledge & Application	2 theory + 3 practical	the second
Reports, oral and written	Blackboard, PowerPoi	Diseases of the eye lids (ptosis, ectropion & entropion)	Knowledge &	2 theory + 3	the third

theoretical exams	nt slides, practical experimen ts		Applica tion	pract ical	
Reports, oral and written theoretical exams	Blackboar d, PowerPoi nt slides, practical experimen ts	Lacrimal drainage diseases (causes & evaluation)	Knowle dge & Applica tion	2 theor y + 3 pract ical	**Fourth**
Reports, oral and written theoretical exams	Blackboar d, PowerPoi nt slides, practical experimen ts	Lacrimal drainage diseases (obstruction & infection)	Knowle dge & Applica tion	2 theor y + 3 pract ical	**Fifth**
Reports, oral and written theoretical exams	Blackboar d, PowerPoi nt slides, practical experimen ts	Diseases of the conjunctiva (infections: viral, bacterial)	Knowle dge & Applica tion	2 theor y + 3 pract ical	**Sixth**
Reports, oral and written theoretical exams	Blackboar d, PowerPoi nt slides, practical experimen ts	Diseases of the conjunctiva (allergic conjunctivitis & degenerative diseases)	Knowle dge & Applica tion	2 theor y + 3 pract ical	**Sevent h**
Reports, oral and written	Blackboar d, PowerPoi nt slides,	Disorders of the cornea inflammation (infection & allergic)	Knowle dge & Applica tion	2 theor y + 3	**The eighth**

theoretical exams	practical experiments			practical	
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Anomalies of the cornea (congenital: microcornea, megalocornea, sclerocornea, keratoconus, anophthalmus)	Knowledge & Application	2 theory + 3 practical	**Ninth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Diseases of the crystalline lens (abnormalities of shape, ectopia, watery eye)	Knowledge & Application	2 theory + 3 practical	**tenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Congenital cataracts	Knowledge & Application	2 theory + 3 practical	**eleventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Acquired cataracts	Knowledge & Application	2 theory + 3 practical	**twelfth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical	Diseases of the uveal tract (uveitis: infection, fungal, bacterial)	Knowledge & Application	2 theory + 3 practical	**thirteenth**

	experiments				
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Anterior & posterior uveitis	Knowledge & Application	2 theory + 3 practical	**fourteenth**
Reports, oral and written theoretical exam	Blackboard, PowerPoint slides, practical experiments	Vitreous opacities (introduction, vitreous hemorrhage, etc.)	Knowledge & Application	2 theory + 3 practical	**fifteenth**

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams

40-

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	**Main References (Sources)**
	Recommended books and references (scientific (...journals, reports
	Electronic references and websites

glasses and Contact Lenses	**Course name -1**
OPT 405	**Course code -2**
First Semester 2026/2027	**Semester/Year -3**
1/9/2025	**Date of preparation of the -4 description**
Practical and face-to-face lectures	**Available forms of -5 attendance**
30 theoretical hours + 45 practical hours 2 units	**/ Number of credit hours (total) -6 Number of units (total)**
	Name of the course supervisor -7 mention all names, if there is more) (than one name

Course objectives -8

The course aims to enable students to identify the types of medical frames and lenses required by patients and to order them using numerical language. It also equips students with the ability to select appropriate spectacles and apply proper maintenance methods, ensuring high-quality visual performance and proper care of medical eyeglasses.

Teaching and learning strategies -9

The course relies on **interactive lectures** supported by clinical images and illustrative presentations, alongside the **discussion of real pathological cases** to apply theoretical concepts in practice. It also encourages **self-directed learning** through reports, seminars, and the review of recent scientific literature

. B. Course specific skill objectives

- Mastering the skills of **clinical eye examination** using basic instruments and tools for preliminary diagnosis.

- Applying **practical procedures** in diagnosing common eye diseases such as strabismus and refractive errors.
- Developing the ability to **analyze clinical cases** and link them with theoretical knowledge to reach an appropriate treatment plan.
- Enhancing **medical communication skills** with patients and colleagues through the preparation of scientific reports and seminars.

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects

. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

Daily tests, semester exams, final exams, weekly reports on the subject seminars on the study subjects , discussions and conversations during the . lesson

C. Affective and value- based goals

Providing students with a deep knowledge and understanding of how laser technologies work in the field of vision care, appreciating their role in improving visual acuity, emphasizing the importance of precision and sensitive patient .care, and building high ethical and professional values in them

(In-person lectures), summer and professional training, graduation projects . field visits, and practical training in clinical subjects

- **Evaluation methods**

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital

D. General and transferable skills (other skills related to employability and . (personal development

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Spectacle, parts of spectacle	Knowledge & Application	**2 theory + 3 practical**	**the first**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Spectacle frames and measurements for different types of spectacles	Knowledge & Application	**2 theory + 3 practical**	**the second**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	How to maintain eyeglasses	Knowledge & Application	**2 theory + 3 practical**	**the third**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	B.V.P (Back Vertex Power)	Knowledge & Application	**2 theory + 3 practical**	**Fourth**

Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Decentration (single lens and bifocal lens)	Knowledge & Application	**2 theory + 3 practical**	**Fifth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Lenticular lenses (spherical (+) or (-))	Knowledge & Application	**2 theory + 3 practical**	**Sixth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Bifocal glasses and how to fit bifocals	Knowledge & Application	**2 theory + 3 practical**	**Seventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Progressive glasses	Knowledge & Application	**2 theory + 3 practical**	**The eighth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Auto reflection coating for different materials, method of lens tinting	Knowledge & Application	**2 theory + 3 practical**	**Ninth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Prism lens and stages of making prism lens	Knowledge & Application	**2 theory + 3 practical**	**tenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Image jump, productive and safety glasses	Knowledge & Application	**2 theory + 3 practical**	**eleventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Variation in the size of the retinal image	Knowledge & Application	**2 theory + 3 practical**	**twelfth**

Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Spectacle, parts of spectacle (revision)	Knowledge & Application	**2 theory + 3 practical**	**thirteenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Spectacle frames and measurements for different types of spectacles (revision)	Knowledge & Application	**2 theory + 3 practical**	**fourteenth**
Reports, oral and written theoretical exam	Blackboard, PowerPoint slides, practical experiments	Revision	Knowledge & Application	**2 theory + 3 practical**	**fifteenth**

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams

41-

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	**Main References (Sources)**
	Recommended books and references (scientific (...journals, reports
	Electronic references and websites

Kind alternatives	**Course name -1**
OPT 406	**Course code -2**
Second Semester 2026/2027	**Semester/Year -3**
1/9/2025	**Date of preparation of the -4 description**
Practical and face-to-face lectures	**Available forms of -5 attendance**
30 theoretical hours + 45 practical hours 2 units	**/ Number of credit hours (total) -6 Number of units (total)**
	Name of the course supervisor -7 mention all names, if there is more) (than one name

Course objectives -8

The course aims to enable students to identify the types of medical frames and lenses required by patients and to order them using numerical language. It also equips students with the ability to select appropriate spectacles and apply proper maintenance methods, ensuring high-quality visual performance and proper care of medical eyeglasses.

Teaching and learning strategies -9

The course relies on **interactive lectures** supported by clinical images and illustrative presentations, alongside the **discussion of real pathological cases** to apply theoretical concepts in practice. It also encourages **self-directed learning** through reports, seminars, and the review of recent scientific literature

. B. Course specific skill objectives

- Learning how to take an impression of the eye or facial defect using appropriate materials and tools.
- Designing a wax model for the ocular prosthesis and modifying it according to the patient’s condition.

- Acquiring the skill of selecting suitable materials and devices used in manufacturing ocular and facial prostheses.
- Mastering the steps of fabricating a complete ocular prosthesis from start to final form.
- Developing the ability to evaluate patient conditions and determine the most suitable prosthesis in terms of form and function.
- **Teaching Methods:** Face-to-face instruction (scientific films and videos, laboratories, summer and professional training, graduation projects). **Clinical Training:** Hospital visits and practical training supervised by specialized medical staff.
- **Assessment Methods:** Daily quizzes, midterm and final exams, weekly reports, seminars, and practical discussions during hospital sessions.

Teaching and learning methods

The course seeks to foster professional and ethical responsibility in dealing with patients, while reinforcing values of compassion and humanity in providing visual care. It also instills commitment to quality standards and scientific integrity, in addition to promoting teamwork and collaboration in both academic and clinical environments.

Evaluation methods

Daily tests, semester exams, final exams, weekly reports on the subject seminars on the study subjects , discussions and conversations during the . lesson

C. Affective and value- based goals

Providing students with a deep knowledge and understanding of how laser technologies work in the field of vision care, appreciating their role in improving visual acuity, emphasizing the importance of precision and sensitive patient .care, and building high ethical and professional values in them

(In-person lectures), summer and professional training, graduation projects . field visits, and practical training in clinical subjects

- **Evaluation methods**

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital

D. General and transferable skills (other skills related to employability and . (personal development

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Assessment Methods	Teaching Methods	Unit / Topic	Learning Outcomes	Hours (Theory + Practical)	Week
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Anatomy of the eye	Knowledge & Application	2 theory + 3 practical	**the first**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Introduction to the ocular prosthesis	Knowledge & Application	2 theory + 3 practical	**the second**
Reports, oral and written	Blackboard, PowerPoint slides,	Types of ocular prosthesis (advantages and disadvantages)	Knowledge &	2 theory + 3	**the third**

theoretical exams	practical experiments		Application	practical	
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Causes of eye and facial damage	Knowledge & Application	2 theory + 3 practical	**Fourth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Types of eye damage	Knowledge & Application	2 theory + 3 practical	**Fifth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Materials used for ocular and orbital prosthesis	Knowledge & Application	2 theory + 3 practical	**Sixth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Instruments and devices used for ocular prosthesis	Knowledge & Application	2 theory + 3 practical	**Seventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Patient assessment for ocular and orbital prosthesis	Knowledge & Application	2 theory + 3 practical	**The eighth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Impression materials for ocular and orbital prosthesis	Knowledge & Application	2 theory + 3 practical	**Ninth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Impression of the eye defect	Knowledge & Application	2 theory + 3 practical	**tenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides,	Types of wax pattern ocular prosthesis	Knowledge & Application	2 theory + 3	**eleventh**

	practical experiments			practical	
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Wax pattern for ocular defect	Knowledge & Application	2 theory + 3 practical	**twelfth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Wax pattern for facial defect	Knowledge & Application	2 theory + 3 practical	**thirteenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Try-in of anterior and posterior wax pattern on patient with modifications	Knowledge & Application	2 theory + 3 practical	**fourteenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Fabrication of the complete artificial eye from the wax pattern	Knowledge & Application	2 theory + 3 practical	**fifteenth**

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams

42.

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	**Main References (Sources)**
	Recommended books and references (scientific (...journals, reports

	Electronic references and websites

Eye rays and sonar	**Course name -1**
OPT 409	**Course code -2**
first Semester 2026/2027	**Semester/Year -3**
1/9/2025	**Date of preparation of the -4 description**
Practical and face-to-face lectures	**Available forms of -5 attendance**
30 theoretical hours + 45 practical hours 2 units	**/ Number of credit hours (total) -6 Number of units (total)**
	Name of the course supervisor -7 mention all names, if there is more) (than one name

Course objectives -8

Understand the fundamentals of using X-rays and ultrasound in diagnosing eye diseases.

Learn how to operate and maintain radiological imaging devices and perform ocular ultrasound examinations.

Acquire the skill of interpreting radiological images and ultrasound finding

Teaching and learning strategies -9

The course relies on **interactive lectures** supported by clinical images and illustrative presentations, along with **discussion of real pathological cases** to apply theoretical concepts in practice. It also encourages **self-directed learning** through reports, seminars, and the review of recent scientific literature.

- **Perform ocular examinations using X-ray and ultrasound devices.**
- **Interpret radiological images and examination reports, linking them to clinical cases.**
- **Diagnose common eye diseases such as tumors, internal hemorrhage, or retinal detachment using imaging techniques.**
- **Develop the skill of preparing accurate medical reports after examinations.**
- **Acquire the ability to communicate scientifically with physicians and colleagues when discussing examination results.**

Teaching Methods: Face-to-face instruction (scientific films and videos, laboratories, summer and professional training, graduation projects). Clinical Training: Hospital visits and practical training supervised by specialized medical staff.

Assessment Methods: Daily quizzes, midterm and final exams, weekly reports, seminars, and practical discussions during hospital sessions.

Teaching and learning methods

The course seeks to foster professional and ethical responsibility in dealing with patients, while reinforcing values of compassion and humanity in providing visual care. It also instills commitment to quality standards and scientific integrity, in addition to promoting teamwork and collaboration in both academic and clinical environments.

Evaluation methods

Daily tests, semester exams, final exams, weekly reports on the subject seminars on the study subjects , discussions and conversations during the . lesson

C. Affective and value- based goals

Providing students with a deep knowledge and understanding of how laser technologies work in the field of vision care, appreciating their role in improving visual acuity, emphasizing the importance of precision and sensitive patient .care, and building high ethical and professional values in them

(In-person lectures), summer and professional training, graduation projects . field visits, and practical training in clinical subjects

- **Evaluation methods**

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital

D. General and transferable skills (other skills related to employability and . (personal development

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Assessment Methods	Teaching Methods	Unit / Topic	Learning Outcomes	Hours (Theory + Practical)	Week
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Introduction to radiology, X-ray	Knowledge & Application	2 theory + 3 practical	**the first**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides,	Standard orbital views, orbital anatomy, radiographic changes in pathology	Knowledge & Application	2 theory + 3	**the second**

	practical experiments			practical	
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Foreign body localization by plain X-ray film	Knowledge & Application	2 theory + 3 practical	**the third**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Introduction to CT of the orbit	Knowledge & Application	2 theory + 3 practical	**Fourth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Optic nerve tumors, orbital tumors (primary, secondary, metastasis) by CT-scan	Knowledge & Application	2 theory + 3 practical	**Fifth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Introduction to MRI of the orbit, physical principles of MRI	Knowledge & Application	2 theory + 3 practical	**Sixth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Clinical applications of MRI in orbital diseases	Knowledge & Application	2 theory + 3 practical	**Seventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Trauma and tumors of the orbit by MRI	Knowledge & Application	2 theory + 3 practical	**The eighth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Advantages and disadvantages of MRI vs. CT-scan	Knowledge & Application	2 theory + 3 practical	**Ninth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides,	Introduction to ultrasonography, ultrasound biomicroscopy (UBM)	Knowledge & Application	2 theory + 3	**tenth**

	practical experiments			practical	
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Diagnostic orbital ultrasonography	Knowledge & Application	2 theory + 3 practical	**eleventh**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	A-scan and B-scan ultrasonography	Knowledge & Application	2 theory + 3 practical	**twelfth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Indications of orbital ultrasonography	Knowledge & Application	2 theory + 3 practical	**thirteenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	Ophthalmic ultrasound and ultrasound biomicroscopy	Knowledge & Application	2 theory + 3 practical	**fourteenth**
Reports, oral and written theoretical exams	Blackboard, PowerPoint slides, practical experiments	How to write an ultrasound report	Knowledge & Application	2 theory + 3 practical	**fifteenth**

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams

43-

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available

Internet	Main References (Sources)
American Academy of Ophthalmology • Textbook of Radiology and Imaging	Recommended books and references (scientific (...journals, reports
	Electronic references and websites

Workshop of Optical Technologies	Course name -1
OPT 410	Course code -2
Second Semester 2026/2027	Semester/Year -3
1/9/2025	Date of preparation of the -4 description
Practical, Face-to-Face Lectures	Available forms of -5 attendance
60 Practical Hours / 4 Units	/ Number of credit hours (total) -6 Number of units (total)
	Name of the course supervisor -7 mention all names, if there is more) (than one name
Course objectives -8	
Enable students to understand how medical spectacles work and differentiate between them, while acquiring the ability to manage the optical workshop professionally and practically.	
Teaching and learning strategies -9	

Equip students with the ability to identify how medical spectacles function and distinguish between different types, master examination and practical application skills, and develop workshop management skills including work organization, quality control, and efficient use of tools and devices.
• **Develop professional and ethical responsibility in dealing with patients, reinforce compassion and humanity in providing visual care, instill commitment to quality standards and scientific integrity, and strengthen Teamwork, computer .teamwork in academic and clinical environments typing, English communication, work endurance and problem-solving, online communication skills.**
Teaching and learning methods
Interactive lectures supported by clinical images and demonstrations **Real case discussions to apply theoretical concepts practically** **Self-directed learning through reports, seminars, and recent scientific readings** **Practical training: scientific films, laboratory work, summer and professional training, graduation projects** **Field visits and hospital-based training by specialized medical staff**
Evaluation methods
Daily quizzes **Midterm and final examinations (oral and written)** **Weekly reports** **Seminars within the course** **Practical discussions and conversations during hospital-based training**
C. Affective and value- based goals Providing students with a deep knowledge and understanding of how laser technologies work in the field of vision care, appreciating their role in improving visual acuity, emphasizing the importance of precision and sensitive patient .care, and building high ethical and professional values in them

(In-person lectures), summer and professional training, graduation projects . field visits, and practical training in clinical subjects

- **Evaluation methods**

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital

D. General and transferable skills (other skills related to employability and . (personal development

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Assessment Methods	Teaching Methods	Unit / Topic	Learning Outcomes	Hours (Theory + Practical)	Week
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Introduction	Knowledge & Application	4 Practical	**the first**

Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Types of lenses	Knowledge & Application	4 Practical	**the second**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	IPD measurement	Knowledge & Application	4 Practical	**the third**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	IPD measurement	Knowledge & Application	4 Practical	**Fourth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Drawing patterns of different frames	Knowledge & Application	4 Practical	**Fifth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical	Drawing patterns of different frames	Knowledge & Application	4 Practical	**Sixth**

	Experiments				
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Drawing patterns of different frames	Knowledge & Application	4 Practical	**Seventh**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Determining cylinder lens center & axis	Knowledge & Application	4 Practical	**The eighth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Determining cylinder lens center & axis	Knowledge & Application	4 Practical	**Ninth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Determining cylinder lens center & axis	Knowledge & Application	4 Practical	**tenth**
Reports, Oral & Written Exams	Blackboard, PowerPoint,	Transposition	Knowledge & Application	4 Practical	**eleventh**

	Practical Experiments				
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Cutting lenses	Knowledge & Application	4 Practical	**twelfth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Cutting lenses	Knowledge & Application	4 Practical	**thirteenth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Cutting lenses	Knowledge & Application	4 Practical	**fourteenth**
Reports, Oral & Written Exams	Blackboard, PowerPoint, Practical Experiments	Cutting lenses	Knowledge & Application	4 Practical	**fifteenth**

Course Evaluation -11

Student activities and reports, oral and written theoretical and practical exams

44.

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	**Main References (Sources)**
	Recommended books and references (scientific (...journals, reports
	Electronic references and websites