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

2025

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical
Faculty/Institute: College of Health and Medical Technologies/ Kufa
Scientific Department; Department of Version Screening Techniques
Academic or Professional Program Name: Bachelor of Version Screening Technology (Optometrist)
Final Certificate Name: Bachelor's degree in Version Screening Techniques
Academic System: "Semester \ Annual Integrated Courses "Description
Preparation Date: 2026 \3\3
File Completion Date: 2026 \3\3

Signature:
Head of Department Name
Dr. Zainab Abdalzahra abdalhsan
Date: 3\3\2026

Signature:
Scientific Associate Name
Assist. Prof.Dr. Ahmed Fadel Odeh
Date: 3\3\2026

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance Dep
Assist.Lac .: Inas Kazim Al-Khazraji
Signature:

Approval of the Dean

قسم تقنيات
فحص البصر

1. Program Vision

- To produce graduates from the Department of Optometry Technologies who possess distinguished practical and scientific skills within the academic and scientific community, and who play an active and influential applied role in the technical and health fields, thereby meeting the needs of society and the requirements of the labor market.

2. Program Mission

To qualify graduates of the Department of Optometry Technologies to work in eye hospitals and health centers with a high level of professional competence and quality education, equipped with the necessary skills in visual examination, determining visual acuity, vision correction, and prescribing types of lenses.

3. Program Objectives

- To prepare and train specialized personnel in the field of optical technologies.
- To conduct vision and visual acuity examinations, diagnose and correct strabismus, recommend lens types, and manufacture optical substitutes.
- To work in workshops for assembling medical eyeglass lenses and to utilize medical computer systems in vision testing and correction.
- To prescribe medical glasses, contact lenses, and various visual and optical alternatives; repair eyeglasses; and maintain optical medical devices. This is achieved through continuous curriculum updates and development in all scientific and practical areas, while ensuring the availability of qualified teaching staff in universities and institutes to serve the community.

4. Program Accreditation

Is it possible to obtain accreditation for the programs? And from which body? Detailed accreditation information, including a self-accreditation report and a conformity report, has been prepared.

5. Other External Influences
Is there a sponsor for the program? Middle Euphrates University, Iraqi Ministry of Health, World Health Organization

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	8	17	18.3 %	-
College Requirements	7	22	23.7 %	-
Department Requirements	14	54	58%	Basic
Summer Training	2	Stages two and third Stages third and four	50%	Basic
Other	-	-	-	-

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	Practical
The first stage/first course	ATU13_VST_111 CM	Anatomy of the head and neck	2	5
The first stage/first course	ATU13_VST_112 CM	Principles of chemistry	2	4
The first stage/first course	ATU13_VST_113 CM	Medical and optical physics 1	3	5
The first stage/first course	ATU13_VST_114 CM	Biology 1	2	4
The first stage/first course	ATU12	Computer principles 1	1	2
The first stage/first course	ATU13	Human rights and democracy	2	0
The first stage/first course	ATU13_VST_117 CM	Medical terms	3	0
First stage/second course	ATU13_VST_121 CM	Anatomy of the eye	2	5
First stage/second course	ATU13_VST_122 CM	Biochemistry	2	4
First stage/second course	ATU13_VST_123 CM	Medical and optical physics 2	3	5
First stage/second course	ATU13_VST_124 CM	Biology 2	2	4
First stage/second course	ATU11	Arabic	2	0
The second stage / first course	ATU13_VST_211 CM	Philosophy of the eye and vision 1	2	4
The second stage / first course	ATU13_VST_212 CM	Optical devices 1	2	5
The second stage / first course	ATU13_VST_213 CM	Ocular health 1	2	4
The second stage / first course	ATU13_VST_214 CM	Refractive errors 1	2	5
The second stage / first course	ATU13_VST_215 CM	Statistical applications1	1	3
The second stage / first course	ATU13_VST_216 CM	Medical terms	2	0
The second stage / first course	ATU22	Computer	1	2
The second stage / first course	ATU24	Crimes of the Defunct Baath party	2	0

The second stage / second course	ATU13_VST_221 CM	Philosophy of the eye and vision 2	2	4
The second stage / second course	ATU13_VST_222 CM	Optical devices 2	2	5
The second stage / second course	ATU13_VST_223 CM	Ocular health 2	2	4
The second stage / second course	ATU13_VST_224 CM	Refractive errors 2	2	5
The second stage / second course	ATU13_VST_225 CM	Statistical applications 2	1	3
The second stage / second course	ATU13_VST_226 CM	pharmaceutical	2	0
The second stage / second course	ATU13_VST_227 CM	Lasers in ophthalmology	1	3
The second stage / second course	ATU21	Arabic Language2	2	0
The third stage / first course	ATU13_VST_311 CM	**Ocular manifestation of system diseases1**	1	3
The third stage / first course	ATU13_VST_312 CM	**Prescription eyeglasses1**	2	4
The third stage / first course	ATU13_VST_313 CM	**Squint1**	2	4
The third stage / first course	ATU13_VST_314 CM	**Refractive errors3**	2	4
The third stage / first course	ATU13_VST_315 CM	**Optical Equipment3**	2	4
The third stage / first course	ATU13_VST_316 CM	**Treatment of ocular diseases by laser**	1	2
The third stage / second course	ATU13_VST_321 CM	**Ocular manifestation of system diseases2**	1	3
The third stage / second course	ATU13_VST_322 CM	**Prescription Eyeglasses2**	2	4
The third stage / second course	ATU13_VST_323 CM	**Squint2**	2	4
The third stage / second course	ATU13_VST_324 CM	**Refractive errors4**	2	4
The third stage / second course	ATU13_VST_325 CM	**Optical Equipment4**	2	4
The third stage / second course	ATU13_VST_326 CM	**Research Methodology**	2	0

8. Expected learning outcomes of the program

Knowledge

1. Graduating specialized scientific personnel.

2. Operating and maintaining medical equipment used in eye examinations.

3. Enabling students to acquire knowledge, understanding, and skills in identifying and maintaining eye examination equipment.

4. Equipping students with the necessary skills to manage various eye conditions. 5.

Enabling students to contribute to the understanding and treatment of eye conditions, intervening when necessary, and providing training in health centers to assess their ability to apply the acquired knowledge. This is achieved through monitoring by specialized trainers in the same field, using standardized tests, surprise quizzes, and feedback.	
Skills	
1- The student should use the equipment correctly. 2- The student should apply what they have learned (practice).	
1- **Assessment**	
1. Completing classroom and homework assignments 2. Preparing reports on practical experiments	3. Administering daily and term tests 4. Administering final exams

9. Teaching and Learning Strategies

1 • Cooperative learning strategies (where groups of 3 or 4 students work together to solve a specific assignment or problem)

• Brainstorming strategy (a mental stimulation technique to encourage students to consider all possible scenarios – a case study)

• Discussion strategy

• Learning kit strategy

• Using modern learning tools, such as laboratory equipment for vision testing

• Conducting workshops, seminars, and training courses

2- • Viewing illustrative images and videos

10. Evaluation methods

1. Completing in-class and extracurricular assignments
2. Surprise quizzes
3. Scientific reports and discussion panels
4. Final achievement tests
5. Assessing practical skills through laboratory experiments

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Dr.Zainb Abdalzahra abd alhassan	physics	Laser physics			Yes	
Assist. Lecturer Huseen satar rbat	Medical Laborator Techniques	Biosciences			Yes	
Dr. Aqeel Salim Raheem	physics	Laser and optoelectronics			Yes	
Dr. Dargham Abdul Jalil Rasoul	Engineer				Yes	
Assist. Lecturer Hanan Saad Hashem	Biology	Microbiology			Yes	
Assist. Lecturer Rusul Fadhil Abdul Abbas	Biology	Physiology			Yes	
Assist. Lecturer Zahraa Mohammed Mashkor	physics	physics			Yes	
Assist. Lecturer Janan Karim Issa	Biology	Microbiology			yes	
Assist. Lecturer Ghassan Zaher Muhammad	Mathematical Sciences	Statistics			yes	
Dr. Haider Khadir Khattar	Chemistry	Physical Chemistry			yes	

Dr. habah taklif majid	Biology	Microbiology			yes	

12. Professional Development

Mentoring new faculty members

Orienting New Faculty Members

1. Informing them of directives issued by higher authorities through:

a. The department council.

b. Social media platforms.

c. Consultative meetings.

2. Adherence to working hours
3. Adherence to exam and lecture schedules
4. Encouraging the completion of scientific research
5. Encouraging the completion of the academic plan, including seminars, workshops, discussion panels, and courses.

Professional development of faculty members

Professional Development for Faculty Members:

1. Enroll faculty members in specialized courses such as (teaching and training methodologies courses).
2. Assign faculty members to conduct seminars and specialized courses.
3. Facilitate faculty members' participation in professional development courses at Ministry of Health institutions.

13. 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.

14. **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

15.Program Development Plan
The department has many methodological and research plans in order to develop the department and the work environment, as the department head, the department council and the scientific committee work to provide all the requirements for developing the department's curricula.

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	ATU13_VST_111 CM	Anatomy of the head and neck	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_112 CM	Principles of chemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_113 CM	Medical and optical physics 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_114 CM	Biology 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_115 CM	Computer principles 1	optional	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_116 CM	Human rights and democracy	optional	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_117 CM	Medical terms	optional	√	√	√	√	√	√	√	√	√	√	√	√

Program Skills Outline

Year/Level	Course Code	Course Name	Basic or optional	Required program Learning outcomes											
				Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2026 second semester Step one	ATU13_VST_121CM	Anatomy of the eye	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_122CM	Biochemistry	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_123CM	Medical and optical physics 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_124CM	Biology 2	optional	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_125CM	Arabic	optional	√	√	√	√	√	√	√	√	√	√	√	√

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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	
2025-2026 first semester Step two	ATU13_VST_211CM	Philosophy of the eye and vision 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_212CM	Optical devices 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_213CM	Ocular health 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_214CM	Refractive errors 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_215CM	Statistical applications1	optional	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_216CM	Medical terms	optional	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_217CM	Computer	optional	√	√	√	√	√	√	√	√	√	√	√	√	
	ATU13_VST_218CM	Baath Party crimes	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
2025-2026 second semes Step two	ATU13_VST_221CM	Philosophy of the eye and vision 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_222CM	Optical devices 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_223CM	Ocular health 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_224CM	Refractive errors 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_225CM	Statistical applications 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_226CM	pharmaceutical	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_227CM	Lasers in ophthalmology	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_228CM	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
2025-2026 first semeste Step Three	ATU13_VST_311 CM	Ocular manifestation of system diseases1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_312 CM	Prescription eyeglasses1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_313 CM	Squint1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_314 CM	Refractive errors3	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_315 CM	Optical Equipment3	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_316 CM	Treatment of ocular diseases by laser	Basic	√	√	√	√	√	√	√	√	√	√	√	√
				√	√	√	√	√	√	√	√	√	√	√	√
				√	√	√	√	√	√	√	√	√	√	√	√

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or option al	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2026 Second semest Step two	ATU13_VST_321 CM	Ocular manifestation of system diseases2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_322 CM	Prescription Eyeglasses2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_323 CM	Squint2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_324 CM	Refractive errors4	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_325 CM	Optical Equipment4	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13_VST_326 CM	Research Methodology	optional	√	√	√	√	√	√	√	√	√	√	√	√
				√	√	√	√	√	√	√	√	√	√	√	√
				√	√	√	√	√	√	√	√	√	√	√	√

Course Description Form

Arabic Language (2)

1. Course Name: Arabic Language (2)	
Course Code: **ATU21**	
2. Semester/Year: Second Semester/Academic Year 2025-2026	
Date of Preparation of this Description: 15/02/2026	
3. Available Attendance Forms: In-person	
Total Study Hours/Total Units: 2 hours per week/2 units	
4. Name of Course Instructor (if more than one, please specify): Name: Hussein Attia Saleh Em husseinfigo@gmail.com	
Course Name: Arabic Language (2)	
5. Course Code: autuchm_vs228	
Semester/Year: Second Semester/Academic Year 2025-2026	
6. Date of Preparation of this Description: 15/02/2026	
Available Attendance Forms: In-person	
7. Total Study Hours/Total Units: 2 hours per week/2 units	
Name of Course Instructor (if more than one, please specify): Name: Hussein Attia Saleh Em husseinfigo@gmail.com	
8. Course Objectives:	
1 This course aims to develop students' skills in understanding literary and scientific texts, enhance their linguistic abilities in reading and writing, and develop their skills in drafting official applications in correct language free of errors.	9. **Course Objectives:**
9. Teaching and learning strategies	
1. .1Explanatory Lectures: The instructor explains the various aspects of Arabic rhetoric (semantics, eloquence, and figures of speech) and helps students develop their ability to write essays in correct and organized language. This is accompanied by presentations and illustrative images. 2. .2Practical Demonstrations: The instructor uses illustrative images to highlight common errors. **3.** .3Workshops: Students are divided into small groups and trained on how to write official applications and literary texts in a clear and professional style.	**strategy**

free of spelling, morphological, and grammatical errors, under the supervision of the instructor.	

10. Course Structure

Assessment Method	Learning Method	Unit or Topic Name	Required Learning Outcomes	Hours	Week
Theory tests + practical tests + reports	**My presence**	The rhetoric of medicine – the optimal use of the Arabic language to deal with patients.	Understanding the lecture	2	First
		Pragmatics – Discourse Strategies: a. Functions of language. b. Elements of discourse. c. Discourse strategies.		2	Second
		Cultural Study of Ancient Poetic Texts – Selections from Abbasid Poetry		2	Third
		An introduction to Arabic rhetoric and its importance		2	Fourth

		The informative style, its definition and types.		2	Fifth
		Simile, its elements and types, applications on selected texts (Quranic verses - poetry).		2	Sixth
		Metaphor and metonymy (applications).		2	Seventh
		Contemporary Arabic Language Issues – Classical and Colloquial Arabic.		2	Eighth
		How to be eloquent, developing language skills – oratory and poetry – public speaking skills		2	Ninth
		Exercises on writing a complete essay.		2	Tenth
		The difference between ض and ظ		2	Eleventh
		Quranic expression: selected examples		2	Twelfth
		Common mistakes		2	Thirteenth
		Say this, but don't say that.		2	Fourteenth
		review		2	Fifteenth

11. Course Evaluation

The grade out of 100 is distributed according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, and written exams, reports, etc.

12. Learning and teaching resources

Curriculum of the College of Health and Medical Technologies - Kufa	Required textbooks (methodology, if applicable)
Grammatical Meanings. Dr. Fadhil Saleh Al-Samarrai	Main references (sources)
1 .Say and Don't Say. Dr. Mustafa Jawad. 2 .Cultural Criticism: A Study of Arab Cultural Patterns. Dr. Abdullah Al-Ghadhami. 3 .On Linguistic Sounds: A Study of Arabic Vowel Sounds. Dr. Ghalib Fadil Al-Mutalibi.	Recommended supporting books and references (scientific journals, reports...)

4 .The Detailed History of the Arabs Before Islam. Dr. Jawad Mustafa. 5 .Discourse Strategies (A Pragmatic Linguistic Approach). Dr. Abdul-Hadi bin Dhafer Al-Shahri. 6 .How to Be Eloquent. Dr. Abu Malik Sameh Abdul-Hamid. Foreword by Dr. Yasser Barhami. 7 .Studies in Language. Dr. Ibrahim Al-Samarrai. 8 .From the Eloquence of the Qur'an. Dr. Ahmed Ahmed Badawi. 9 .The Foundation of Eloquence. Jar Allah Al-Zamakhshari. 10 .The Meanings of Grammar. Dr. Fadhil Saleh Al-Samarrai. 11 -Al-Bayan wa Al-Tabyeen, by Abu Amr Al-Jahiz. 12 -Dala'il Al-I'jaz, by Abd Al-Qahir Al-Jurjani. 13 -Neurolinguistics: Language in the Brain (Symbolic – Neural – Cognitive), by Dr. Atiya Suleiman Ahmed. 14 -Neurolinguistics, by José Baggio, translated by Abd Al-Fattah Abdullah. 15 -Rhetoric and Application, by Ahmed Matloub. 16 -Simplified Rhetoric, by Dr. Abdul Aziz bin Ali Al-Harbi.	
	Electronic references, websites

Course Description Form

1 Course Name:	
Research Methodology 2	
2 Course Code:	
ATU13_VST_326CM	
3 Semester / Year:	
Sessional /2025-2026	
4 Description Preparation Date:	
10/2/2026	
5 Available Attendance Forms:	
In presence	
6 Number of Credit Hours (Total) / Number of Units (Total)	
30/2 Number of hours (2) Number of units (2)	
7 Course administrator's name (mention all, if more than one name)	
Name: Hayder Khudhair Khattar	Email: haider.khattarckm11@atu.edu.iq
8 Course Objectives	
Course Objectives	**1. Research; definitions, characteristics, and types.** **2. Principles of research.** **3. Scientific Methods.** **4. Materials and Methods.** **5. Methods of Data Collection.** **6. Analytic studies.** **7. Variables.** **8. Classification of research.** **9. Intervention studies(experimental).** **10. Pilot study.** **11. Cohort study.** **12. Introduction and literature review.** **13. Literature review in research project.** **14. Research proposal protocol.** **15. Research Problem Formation.for advanced medical studie**
9 Teaching and Learning Strategies	
Strategy	**Key Strategies for Teaching and Learning Research Methodology** 1. **Practical application:**Encouraging students to use research methods in creating realistic, grounded research that serves society. 2. **Use visual aids** : Use pictures and diagrams to facilitate understanding and retention 3. **Hands-on Training** : Organize simulated training sessions to mirror real-life medical situations. 4. **Continuous Assessment** : Use quizzes and interactive activities to gauge the level of understanding. **Goals of These Strategies** 1. **Enhance Understanding** ○ Helping students understand and use research appropriately.

2. **Improve Retention**
   - Utilize various methods to make research stick in the memory.
3. **Develop Skills**
   - Improve students' communication and critical thinking skills.
4. **Prepare for Practical Application**
   - Equip students to face language challenges.

Factors for Choosing the Right Strategy

1. **Student Needs**
   - Consider their prior knowledge and preferred learning styles.
2. **Learning Objectives**
   - Focus on the specific skills and knowledge that need to be acquired.
3. **Available Resources**
   - Account for time, educational materials, and technology.

10 Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Theoretical and practical knowledge	**Research; definitions, characteristics, and types.**	In presence	Quarterly and weekly tests
2	2	Theoretical and practical knowledge	**Principles of research**	In presence	Quarterly and weekly tests
	2	Theoretical and practical knowledge	**Scientific Methods**	In presence	Quarterly and weekly tests
4	2	Theoretical and practical knowledge	**Materials and Methods**	In presence	Quarterly and weekly tests
5	2	Theoretical and practical knowledge	**Methods of Data Collection**	In presence	Quarterly and weekly tests
6	2	Theoretical and practical knowledge	**Analytic studies**	In presence	Quarterly and weekly tests
7	2	Theoretical and practical knowledge	**Variables**	In presence	Quarterly and weekly tests

8	2	Theoretical and practical knowledge	**Classification of research**	In presence	Quarterly and weekly tests
9	2	Theoretical and practical knowledge	**Intervention studies(experimental).**	In presence	Quarterly and weekly tests
10	2	Theoretical and practical knowledge	**Pilot study.**	In presence	Quarterly and weekly tests
11	2	Theoretical and practical knowledge	**Cohort study**	In presence	Quarterly and weekly tests
12	2	Theoretical and practical knowledge	**troduction and literature review**	In presence	Quarterly and weekly tests
13	2	Theoretical and practical knowledge	**Literature review in research project**	In presence	Quarterly and weekly tests
14	2	Theoretical and practical knowledge	**Research proposal protocol**		
15	2	Introduction-structural analysis-basic rules of medical word building	**Research Problem Formation.for advanced medical studies**	In presence	Quarterly and weekly tests

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

12 Learning and Teaching Resources

Required textbooks (curricular books, if any)	It's not available now
Main references (sources)	Academic Writing for International Students of Science by Jane Bottomley. Effective science communication : a practical guide to surviving as a scientist by Sam Illingworth, Grant Allen How to Publish in Biological Sciences by John Measey
Recommended books and references (scientific journals, reports...)	How to write technical reports : understandable structure, good design, convincing presentation
Electronic References, Websites	https://www.taylorfrancis.com/books/mono/10.1201/9781003220886/publish-biological-sciences-john-measey https://www.cambridge.org/core/books/scientific-writing-and-publishing/92765D918D99015011DD71071C8CFD9

Course Description Form

1. 1.Course name

   Biochemistry Chapter 2

2. Course code

   ATU13_VST_122CM

3. First semester

   Annual/ 2025-2026

4. Date this description was prepared

   10/2/2026

5. Available attendance forms

   a.

6. Number of study hours (total) / Number of units (total)

   a. Number of hourstheoretical (2) Practical (4) Number of units (8)

7. Name of course supervisor (if more than one name is mentioned)

   Name: Hussein sattar rebat Email: hussaein.rebat@atu.edu.iq

8. Course objectives

General objective:	Topic objectives
1. Providing students with basic concepts in general chemistry and their application in the health and medical field, thus enhancing understanding of chemical reactions related to vital functions and medical technologies.Teaching students how to administer medications. 2. To enable the student to understand the basic principles of general chemistry and apply them to the analysis of biological samples and the diagnosis of diseases using modern chemical methods. 3. Providing students with the theoretical and practical foundations of general chemistry to support health and medical applications in the fields of analysis, diagnosis, and treatment.	

9. Teaching and learning strategies

	Strategy
1. Direct guidance and follow-up 2. Create a good role model among students 3. Theoretical tests 4. Duties	

10. Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches	week

Practical tests, reports and studies	theoretic al	introduction	Study and knowle dge	2	1.
Practical tests and exams Theory, reports and studies	theoretic al	Amino acids	Study and knowle dge	2	2.
Practical tests and exams Theory, reports and studies	theoretic al	proteins	Study and knowle dge	2	3
Practical tests and exams Theory, reports and studies	theoretic al	enzymes	Study and knowle dge	2	4.
Practical tests and exams Theory, reports and studies	theoretic al	lipide	Study and knowle dge	2	5.
Practical tests and exams Theory, reports and studies	theoretic al	vitamins	Study and knowle dge	2	6.
Practical tests and exams Theory, reports and studies	theoretic al	Carbohydrat es	Study and knowle dge	2	7
Practical tests and exams Theory, reports and studies	theoretic al	Carbohydrat e metabolism	Study and knowle dge	2	8
Practical tests and exams Theory, reports and studies	theoretic al	liver	Study and knowle dge	2	9
Practical tests and exams Theory, reports and studies	theoretic al	Liver diseases	Study and knowle dge	2	10

Practical tests and exams Theory, reports and studies	theoretic al	eye lipide	Study and knowle dge	2	11
Practical tests and exams Theory, reports and studies	theoretic al	Enzymes in clinical diagnosis	Study and knowle dge	2	13
Practical tests and exams Theory, reports and studies	theoretic al	glucose metabolism	Study and knowle dge	2	14
Practical tests and exams Theory, reports and studies	theoretic al	Questionsand solutions	Study and knowle dge	2	15

11.Headquarters Evaluation

Distribution of grades fromTheoretical 60 and practical 40According to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12.Learning and teaching resources

Lippincott's biochemistry	Required textbooks (curriculum if available)
Lehninger Principles	Main References (Sources)
Electronic References / Websites	Electronic references and websites

Course Description Form

1. 1.Course name

General Chemistry Chapter 1

2. 2Course code

ATU13_VST_112CM

3. First semester

Annual/ 2025-2026

4. Date this description was prepared

10/2/2026

5. Available attendance forms

6. Number of study hours (total) / Number of units (total)

Number of hourstheoretical (2) Practical (4) Number of units (8)

7. Name of course supervisor (if more than one name is mentioned)

the name :m.Dr. Haider Khader Khattar

e-mail: haider.khattarckm11@atu.edu.iq

8. Course objectives

General objective:	Topic objectives
1. Providing students with basic concepts in general chemistry and their applica in the health and medical field, thus enhancing understanding of chem reactions related to vital functions and medical technologies. Teaching stud how to administer medications. 2. To enable the student to understand the basic principles of general chemistry apply them to the analysis of biological samples and the diagnosis of diseases u modern chemical methods. 3. Providing students with the theoretical and practical foundations of gen chemistry to support health and medical applications in the fields of anal diagnosis, and treatment.	

9. Teaching and learning strategies

	Strategy
1/Direct guidance and follow-up 2/Create a good role model among students	

3/Theoretical tests

4/Duties

10.Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes		week
Practical tests, reports and studi	theoretical	introduction	Study and knowledge		1.
Practical tests and exams Theory, reports and studies	theoretical	Structure of matter	Study and knowledge		2.
Practical tests and exams Theory, reports and studies	theoretical	chemical bonding	Study and knowledge		3
Practical tests and exams Theory, reports and studies	theoretical	Liquid solutions and mixtures	Study and knowledge		4.
Practical tests and exams Theory, reports and studies	theoretical	Analysis method	Study and knowledge		5.
Practical tests and exams Theory, reports and studies	theoretical	Statistical processing of analytical data	Study and knowledge		6.
Practical tests and exams Theory, reports and studies	theoretical	Neutralize acidity and bases	Study and knowledge		7

Practical tests and exams Theory, reports and studies	theoretical	gaseous air pollution	Study and knowledge		8
Practical tests and exams Theory, reports and studies	theoretical	Oxidation and reduction	Study and knowledge		9
Practical tests and exams Theory, reports and studies	theoretical	Oxidative stress in the eye	Study and knowledge		10
Practical tests and exams Theory, reports and studies	theoretical	Problem solutions	Study and knowledge		11
Practical tests and exams Theory, reports and studies	theoretical	chemotherapy	Study and knowledge		13
Practical tests and exams Theory, reports and studies	theoretical	Carbon dioxide and nitric oxide in the eye	Study and knowledge		14
Practical tests and exams Theory, reports and studies	theoretical	Questionsan, solutions	Study and knowledge		15

11.Headquarters Evaluation

Distribution of grades fromTheoretical 60 and practical 40According to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12.Learning and teaching resources

Fundamentals of Analytical Chemistry - Skoog translatedSkooge	Required textbooks (curriculum if available)
	Main References (Sources)
	Recommended supporting books and references (scientific journals, reports, etc.)

(Electronic References / Websites):	Electronic references and websites

Course Description Form

Squint 2 – 3rd Stage

1. Course Name:
Squint 2

2. Course Code:
ATU13_VST_323CM

3. Semester / Year:
2 nd / 2025-2026

4. Description Preparation Date:
14/2/2026

5. Available Attendance Forms:
In presence

6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours per week / 4 units

7. Course administrator's name (mention all, if more than one name)
Name: **AHMED MOHAMMED NOORI** Email: ahmedalganem@gmail.com

8. Course Objectives

Knowledge	A1	The student is able to understand the theoretical framework of the subject of strabismus a identify its types and causes in detail
	A2	Understand the difference between each type of strabismus, its causes and treatment
	A3	Understand how to use modern methods in treating strabismus and its associated diseases s as lazy eye
	A4	The student is able to diagnose all types of strabismus and how to treat it
Skills	B1	The student is able to examine a strabismus patient
	B2	The student is able to use devices for strabismus patients
	B3	The student is able to meet the needs of the patient and treat him
	B4	The student is able to use modern methods in treating strabismus and associated diseases

Values	C1	Reinforcing scientific values and principles in the student and emphasizing the importance of studies and specialization
	C2	Emphasizing the student's personal characteristics such as integrity, honesty and ethics
	C3	Instilling a love of work and creativity and its importance in the labor market
	C4	Clarifying the importance of adhering to the professional and ethical standards of accounting and auditing profession

9. Teaching and Learning Strategies

1.	Encouraging students to discuss topics related squint.	3.	. 1. Encourage students to discuss topics related to strabismus 4. Deepen understanding of the treatment process for strabismus patients and how to diagnose it early
2.	2. Enabling the student to choose the appropriate method for treating strabismus	4.	Providing up-to-date scientific resources.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and practical knowledge	Esotropia-5: Acute Acquired Concomitant Isotropic (Basics).	In presence	Quarterly and weekly tests.
Second	6		Esotropia-6: Surgical principles		
Third	6		Exotropia-1: Definition, types, pseudoexotropia, exophoria (presentation, diagnosis and treatment)		
Fourth	6		Exotropia-2: Intermittent Exotropia (types, presentation, examination, and treatment)		
Fifth	6		Exotropia-3: convergence insufficiency, infantile exotropia,		

Sixth	6		Exotropia-4: sensory exotropia, consecutive exotropia		
Seventh	6		Exotropia-5: surgical principles		
Eighth	6		Pattern Strabismus: Etiology, Clinical Features and Identification of Pattern Strabismus		
Ninth	6		Special motility disorders-1: Duane retraction syndrome		
Tenth	6		Special motility disorders-2: Duane retraction syndrome treatment		
eleventh	6		Special motility disorders-3: myasthenia gravis		
twelfth	6		Convergence insufficiency-1: Definition, causes, clinical finding diagnosis		
Thirteen	6		Convergence insufficiency-2: Treatment		
fourteen	6		Convergence insufficiency-3: Orthoptic exercise		
fifteen	6		Review.		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	**AMERICAN ACADEMY ASSOCIATION AAO 2024**
Recommended books and references (scientific journals, reports...)	Journals and research in the field of strabismus

Electronic References, Websites	

Course Description Form

Spectacles medical 1- Third Grade

1. Course Name:
Spectacles medical 1
2. Course Code:
ATU13_VST_312CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
4/11/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **GHAITH HUSSEIN ALI** Email: : ghha255@gmail.com
8. Course Objectives

Course Objectives	**General Objective:** To learn how to dispense prescription eyeglasses, the methods of their use, maintenance, and fitting. **Specific Objective:** To learn how to examine and write prescriptions for eyeglasses, understand all types, know how glasses work for the patient, and learn the proper methods of use and maintenance.
9. Teaching and Learning Strategies	
Strategy	• **Didactic Lectures:** The instructor provides theoretical explanations on the principles of prescription eyeglasses, types of lenses and frames, supported by concise educational slides and illustrative images demonstrating the various uses of each type. • **Practical Demonstrations:** Presentation of the steps for vision examination, methods of obtaining optical measurements, and explanation of how to interpret refraction test results and eyeglass prescriptions. • **Group Workshops:** Students are divided into small groups for hands-on training on lens fitting and frame adjustment for patients, under instructor supervision and with the use of defined checklists. • **Clinical Case Studies:** Presentation of real or simulated cases of patients with different refractive errors, for analysis of results, writing appropriate prescriptions, and selecting suitable lenses and frames. • **Interactive Modern Technologies:** Use of augmented or virtual reality and

	simulators to represent vision examinations and eyeglass fitting, providing interactive training for accurate diagnostic and adjustment skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and practical knowledge	Lenses, Types of Medical lenses with drawing	In presence	Quarterly and weekly tests.
Second	6		How can write a prescription for patients		
Third	6		How can write a prescription for patients		
Fourth	6		How can read a prescription for patients		
Fifth	6		Spectacles, Parts of Spectacles with drawing		
Sixth	6		Spectacles frames. (Advantages)		
Seventh	6		Spectacles frames and measurements		
Eighth	6		Frames of sports and measurements		
Ninth	6		Stages of making glass lens (Generation, Blocking and Polishing)		
Tenth	6		Centering the glass lens with the edging		
eleventh	6		Coating, Coated requirements, Types of coating, Anti- Reflection coatings (AR) for (MC & HMC)		
twelfth	6		Coating, Coated requirements, Types of coating, Anti- Reflection coatings (AR) for (MC & HMC)		
Thirteen	6		Blue Cut lens, Multifocal, Ensues, Progressive		

fourteen	6		Cementing lens for the different types of lenses.		
fifteen	6		Revision		

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.	
12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	Clinical Procedures In Primary Eye Care
Recommended books and references (scientific journals, reports...)	Clinical Procedures In Primary Eye Care
Electronic References, Websites	

Course Description Form

Spectacles medical 2- Third Grade

1. Course Name:	
Spectacles medical 2	
2. Course Code:	
ATU13_VST_322CM	
3. Semester / Year:	
Second / 2025-2026	
4. Description Preparation Date:	
13/2/2026	
5. Available Attendance Forms:	
In presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6 hours per week / 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: **GHAITH HUSSEIN ALI**	Email: : ghha255@gmail.com
8. Course Objectives	
Course Objectives	**General Objective:** To learn how to dispense prescription eyeglasses, the methods of their use, maintenance, and fitting. **Specific Objective:** To learn how to examine and write prescriptions for eyeglasses, understand all types, know how glasses work for the patient, and learn the proper methods of use and maintenance.
9. Teaching and Learning Strategies	
Strategy	• **Didactic Lectures:** The instructor provides theoretical explanations on the principles of prescription eyeglasses, types of lenses and frames, supported by concise educational slides and illustrative images demonstrating the various uses of each type. • **Practical Demonstrations:** Presentation of the steps for vision examination, methods of obtaining optical measurements, and explanation of how to interpret refraction test results and eyeglass prescriptions. • **Group Workshops:** Students are divided into small groups for hands-on training on lens fitting and frame adjustment for patients, under instructor supervision and with the use of defined checklists. • **Clinical Case Studies:** Presentation of real or simulated cases of patients with different refractive errors, for analysis of results, writing appropriate prescriptions, and selecting suitable lenses and frames. • **Interactive Modern Technologies:** Use of augmented or virtual reality and

	simulators to represent vision examinations and eyeglass fitting, providing interactive training for accurate diagnostic and adjustment skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and practical knowledge	Groups of materials for single (different size) and bifocal lenses (GM).	In presence	Quarterly and weekly tests.
Second	6		Groups of materials for single (different size) and bifocal lenses (GM).		
Third	6		Care of your glasses (Clearing Method and Storage).		
Fourth	6		Taking care of eye glasses with maintenance.		
Fifth	6		Plano Lens (Advantages).		
Sixth	6		Knife lens.		
Seventh	6		CR-39 Lenses (Advantages and disadvantages).		
Eighth	6		Photo chromatic.		
Ninth	6		IPD (Inter pupil distance).		
Tenth	6		Advantages of frames.		
eleventh	6		Decentration of lenses.		
twelfth	6		Boxing system of lens(bevel).		
fourteen	6		Back Vertex Distance .		
fifteen	6		Revision		

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.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	Clinical Procedures In Primary Eye Care
Recommended books and references (scientific journals, reports...)	Clinical Procedures In Primary Eye Care
Electronic References, Websites	

Course Description Form

Eye health 1 - Second Stage

1. Course Name:
Eye health 1
2. Course Code:
ATU13_VST_213CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
04/11/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **AHMED MOHAMMED NOORI** Email: ahmedalganem@gmail.com

8. Course Objectives

Course Objectives	Introducing the student to all diseases and injuries that the eye is exposed to

9. Teaching and Learning Strategies

Strategy	1. Explanatory lectures: The professor explains the types of eye diseases theoretically, accompanied by presentations and illustrative images. 2. Practical presentations: The professor takes illustrative images to identify eye diseases or refractive errors, and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to identify eye diseases under the supervision of the professor. 4. Clinical case studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and conclude the type of diseases associated with the patient's eye and the appropriate treatment. 5. Use of modern technologies: such as augmented reality or virtual reality to simulate various disease cases and train students to diagnose them in an interactive manner.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

First	6	Theoretical and practical knowledge	Introduction: review of anatomy & physiology the eye	In presence	Quarterly and weekly tests.
Second	6		Introduction : history & examination of the eye		
Third	6		Introduction: certain ophthalmic terms.(terminology)		
Fourth	6		Primary eye care		
Fifth	6		Primary eye care		
Sixth	6		Screening procedures in ophthalmology		
Seventh	6		Screening procedures in ophthalmology		
Eighth	6		School eye screening programs		
Ninth	6		Concept of community ophthalmology sticky eye, watery eye		
Tenth	6		Concept of community ophthalmology flashes of light , floating object in visual field		
eleventh	6		Concept of community ophthalmology long term glaucoma monitoring		
twelfth	6		The epidemiology of blindness (general principles)		
Thirteen	6		The epidemiology of blindness (disease specific strategy)		
fourteen	6		The right to sight (vision 2020)		
fifteen	6		Revision		

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.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	Clinical Procedures In Primary Eye Care
Recommended books and references (scientific journals, reports...)	Clinical Procedures In Primary Eye Care
Electronic References, Websites	

Course Description Form

Eye health 2 - Second Stage

1. Course Name:	
Eye health 1	
2. Course Code:	
ATU13_VST_223CM	
3. Semester / Year:	
2 nd / 2025-2026	
4. Description Preparation Date:	
04/11/2025	
5. Available Attendance Forms:	
In presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6 hours per week / 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: **AHMED MOHAMMED NOORI**	Email: ahmedalganem@gmail.com
8. Course Objectives	
Course Objectives	Introducing the student to all diseases and injuries that the eye is exposed to
9. Teaching and Learning Strategies	
Strategy	1. Explanatory lectures: The professor explains the types of eye diseases theoretically, accompanied by presentations and illustrative images. 2. Practical presentations: The professor takes illustrative images to identify eye diseases or refractive errors, and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to identify eye diseases under the supervision of the professor. 4. Clinical case studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and conclude the type of diseases associated with the patient's eye and the appropriate treatment. 5. Use of modern technologies: such as augmented reality or virtual reality to simulate various disease cases and train students to diagnose them in an interactive manner.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and practical knowledge	**National program for control of blindness**	In presence	Quarterly and weekly tests.
Second	6		**National program for control of blindness**		
Third	6		**Acute loss of vision , differential diagnosis**		
Fourth	6		**Acute loss of vision , differential diagnosis**		
Fifth	6		**Gradual loss of vision**		
Sixth	6		**Gradual loss of vision**		
Seventh	6		**Painful eye : differential diagnosis**		
Eighth	6		**Painful eye : differential diagnosis**		
Ninth	6		**Red eye : differential diagnosis**		
Tenth	6		**Red eye : differential diagnosis**		
eleventh	6		**Information , education and communication**		
twelfth	6		**Rehabilitation of visually handicapped**		
Thirteen	6		**Rehabilitation of visually handicapped**		
fourteen	6		**National program for control of blindness**		

fifteen	6		Revision	

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.	
12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	Clinical Procedures In Primary Eye Care
Recommended books and references (scientific journals, reports...)	Clinical Procedures In Primary Eye Care
Electronic References, Websites	

Course Description Form

1. Course name	
Medicines	
2. Course code	
ATU13_VST_226CM	
3. the chapter/First semester year	
Annual/ 2025-2026	
4. Date this description was prepared	
10/2/2026	
5. Available attendance forms	
6. Number of study hours (total) / Number of units (total)	
2/30 Number of hours (2) Number of units (2)	
7. Name of the course administrator (if more than one name is mentioned)	
the Name : Husseinsattar rebat Email: hussaein.rebat@atu.edu.iq	
8. Course objectives	
General objective: **Student educationEye medications** 1. **Student educationMethods of giving medications**2. **Methods of drug absorption through the eye** 3. **Specific objective: To teach the student to organize work and follow the scientific sequence in processing.** **And direct dealing withFirst aid and necessary treatment for the eye and risks of medications without consulting a specialist doctor**	**Subject objectives**
9. Teaching and learning strategies	
13. Direct guidance and follow-up. 14. Creating a good role model among students. 15. Theoretical tests. 16. Duties.	**Strategy**

Course structure .10

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Practical tests, reports and studies	theoretica	Introduction	Study and knowledge	2	.1
Practical tests and exams Theory, reports and studies	theoretica	Principles of drug therapy	Study and knowledge	2	.2
Practical tests and exams Theory, reports and studies	theoretica	Adrenergic drug	Study and knowledge	2	.3
Practical tests and exams Theory, reports and studies	theoretica	Drug affects the cardiovascular system	Study and knowledge	2	.4
Practical tests and exams Theory, reports and studies	theoretica	**Drugs affecting th endocrine system**	Study and knowledge	2	.5
Practical tests and exams Theory, reports and studies	theoretica	Systemic pharmacology	Study and knowledge	2	.6
Practical tests and exams Theory, reports and studies	theoretica	Clinical applications	Study and knowledge	2	.7

Practical tests and exams Theory, reports and studies	theoretical	Ocular pharmacology	Study and knowledge	2	.8
Practical tests and exams Theory, reports and studies	theoretical	Drug affecting central nervous system	Study and knowledge	2	.9
Practical tests and exams Theory, reports and studies	theoretical	**Principal drug**	Study and knowledge	2	.10
Practical tests and exams Theory, reports and studies	theoretical	**Drug of abuse**	Study and knowledge	2	.11
Practical tests and exams Theory, reports and studies	theoretical	Chemotherapeutic -1	Study and knowledge	2	.12
Practical tests and exams Theory, reports and studies	theoretica	Chemotherapeutic-11	Study and knowledge	2	.13
Practical tests and exams Theory, reports and studies	theoretical	Principle of drug therapy	Study and knowledge	2	.14
Practical tests and exams Theory, reports and studies	theoretica	Anti-inflammatory	Study and knowledge	2	.15

11.Headquarter evaluation

Grade distribution from07According to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, and reports.....etc

12.Learning and teaching resources

Text book of visual science and clinical optometry By Bikas Bahttacharyya	Required textbooks (methodology any)
Clinical pearls for optometry By Roger F.Filips	Main References (Sources)

Optometry magazines of American ophthalmology a optometry academia	Recommended supporting books and references (scientific journals, reports, etc.)
	Electronic references, websites
Medical Terminology Lecture :Introduction Medical Terminology denote condition or state Medical Terminology Lecture :Introduction Suffix: Singular vs. Plural Medical Terminology Denotes Medical Actions Medical Terminology prefixes Denotes Size,Number, time and place Medical terminology terms concerning the body as a w hole	Lectures

Course Description Form

1. Course Name:
Medical terminology 2
2. Course Code:
ATU13_VST_216CM
3. Semester / Year:
Sessional /2025-2026
4. Description Preparation Date:
10/2/2026
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
30/2 Number of hours (2) Number of units (2)
7. Course administrator's name (mention all, if more than one name)
Name: Hayder Khudhair Khattar Email: haider.khattarckm11@atu.edu.iq

قسم تقنيات فحص البصر

8. Course Objectives	
Course Objectives	Objectives of the Medical Terminology Course for Students Topic: Defining the Main Objectives of the Medical Terminolog Course in Educating Students Core Objectives: • Equip students with basic vocabulary in medical terminology, including terms related to anatomy, physiology, pathology, and treatment. • Enhance students' skills in effectively using medical language in both written and verbal communication within healthcare environments. • Develop students' ability to analyze and interpret medical information, including medical records, diagnoses, and treatment plans. • Prepare students for healthcare professions by providi them with the necessary linguistic tools. Expected Learning Outcomes: • Define basic medical terms.

	• Apply medical terminology to describe body structure functions, diseases, and procedures. • Interpret medical records and other written document • Communicate effectively with healthcare professional and patients using precise medical language. • Build a strong foundation for advanced medical studie Key Benefits: • Improve understanding of medical concepts and procedures. • Enhance communication with healthcare professionals • Increase confidence in clinical settings. • Establish a solid foundation for advanced medical studies.

9. Teaching and Learning Strategies

Strategy	Key Strategies for Teaching and Learning Medical Terminology

5. **Practical Application**
   - Encourage students to use terminology in conversations, practical exercises, and real-life scenarios.
6. **Visual Aids**
   - Use images, diagrams, and videos to facilitate understanding and memory retention.
7. **Symbols and Icons**
   - Link terms with symbols and icons to make them easier to remember.
8. **Repetition and Application**
   - Repeatedly use terms in different contexts to strengthen comprehension.
9. **Contextual Understanding**
   - Relate terms to their meanings within the medical context to deepen understanding.
10. **Hands-on Training**
    - Organize simulated training sessions to mirror real-life medical situations.
11. **Continuous Assessment**
    - Use quizzes and interactive activities to gauge the level of understanding.

Goals of These Strategies

5. **Enhance Understanding**
   - Help students grasp the meaning of medical terms and use them correctly.
6. **Improve Retention**
   - Utilize various methods to make terms stick in the memory.
7. **Develop Skills**
   - Improve students' communication and critical thinking skills.
8. **Prepare for Practical Application**

- Equip students to face language challenges in healthcare settings.

Factors for Choosing the Right Strategy

4. **Student Needs**
   - Consider their prior knowledge and preferred learning styles.
5. **Learning Objectives**
   - Focus on the specific skills and knowledge that need to be acquired.
6. **Available Resources**
   - Account for time, educational materials, and technology.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Theoretical and practical knowledge	1-Introduction- structural analysis- basic rules of medical word building .	In presence	Quarterly and weekly tests
2	2	Theoretical and practical knowledge	Major suffixes: (1) suffixes denoting a state or condition	In presence	Quarterly and weekly tests
3	2	Theoretical and practical knowledge	Major suffixes: (1) suffixes denoting a state or condition	In presence	Quarterly and weekly tests
4	2	Theoretical and practical knowledge	Major suffixes: (2) suffixes denoting medical actions	In presence	Quarterly and weekly tests
5	2	Theoretical and practical knowledge	Prefixes: (4) Prefixes size, time, place, roots, and word terminals.	In presence	Quarterly and weekly tests

6	2	Theoretical and practical knowledge	Terms concerning the body as a whole	In presence	Quarterly and weekly tests
7	2	Theoretical and practical knowledge	Terms concerning oncology	In presence	Quarterly and weekly tests
8	2	Theoretical and practical knowledge	Terms concerning the skin and its appendages	In presence	Quarterly and weekly tests
9	2	Theoretical and practical knowledge	Terms concerning the gastrointestinal Tract	In presence	Quarterly and weekly tests
10	2	Theoretical and practical knowledge	Terms concerning the respiratory system and cardiovascular system	In presence	Quarterly and weekly tests
11	2	Theoretical and practical knowledge	Terms concerning the endocrine system	In presence	Quarterly and weekly tests
12	2	Theoretical and practical knowledge	Terms concerning the blood and lymphatic system	In presence	Quarterly and weekly tests
13	2	Theoretical and practical knowledge	Terms concerning the musculoskele system& nervous system	In presence	Quarterly and weekly tests
14	2	Theoretical and practical knowledge	Terms concerning the special sense		
15	2	Introduction- structural analysis- basic rules of medical word building	Introduction- structural analysis- basic rules of medical word building ..	In presence	Quarterly and weekly tests

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

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	It's not available now
Main references (sou	**1-Mosby's Medical Terminology Flash Cards, 4th Edition** - By Mosby's Editorial Staff **2-Terminology: A Short Course, 7th Edition** - By Bernadet Marie Ryan and Audrey Lafferty: This concise textbook off a user-friendly approach to medical terminology, emphasizing word building and practical applications. It includes interactive exercises, case studies, and a medical terminology **3- Medical Dictionary, 28th Edition - By Donald R. Rohen: This classic medical dictionary is a valuable resource for students and healthcare professionals alike. It provides detailed definitions of medical terms, along with pronunciation guides and etymological information.**
Recommended books and references (scientific journals, reports...)	1- Methodology for Medical Terminology 2- Contextualization and Application: Provide real-world examples and case studies to illustrate how medical terminology is used in practice.
Electronic References, Websites	American academy of ophthalmology1-Electronic Resources and Websites for Medical Terminology: 2-Online Dictionaries and Terminology Tools: 3-Merriam-Webster Medical Dictionary: https://www.merriam-webster.com/medical provides comprehensive definitions of medical terms, along with pronunciation guides, etymological information, and usage examples. 4- https://www.medterm.ca/ offers a user-friendly interface to search and learn about medical terms. It includes definitions, pronunciations, synonyms, and related terms.

	Mayo Clinic Medical Dictionary: https://www.mayoclinic.org/diseases-conditions **MedlinePlus Medical Dictionary:** https://medlineplus.gov/ **Dictionary.com:** https://www.dictionary.com/ **Dorland's Illustrated Medical Dictionary:** https://www.dorlandsonline.com/ **Taber's Cyclopedic Medical Dictionary:** https://www.tabers.com/tabersonline/ **Stedman's Medical Dictionary:** https://www.amazon.com/Stedmans-Concise-Medical-Dictionary-Professions/dp/0781730120 **Merriam-Webster Medical Dictionary:** https://www.merriam-webster.com/medical

Course Description Form

Laser treatment of eye diseases - Third Grade

1. Course Name:
Laser treatment of eye diseases
2. Course Code:
ATU13_VST_316CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
4/11/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
2 **hours per week / 2 units**
7. Course administrator's name (mention all, if more than one name)
Name: **GHAITH HUSSEIN ALI** Email: : ghha255@gmail.com
8. Course Objectives

Course Objectives	**General Objective: To enable the student to understand the interaction of laser with living cells for all types of lasers.** **Specific Objectives:** **1- To enable the student to become familiar with the types of lasers used in the treatment of eye diseases.** **2- To enable the student to understand the use of each type of laser for every medical condition after learning its properties and how to use each type.**
9. Teaching and Learning Strategies	
Strategy	1.1 **Didactic lectures**: The instructor delivers theoretical explanations of eye disease types supported by concise, focused slides and illustrative images. 1.2 **Practical demonstrations**: Present diagnostic images and scenarios, explaining how to interpret examination findings and results from vision and refraction tools. 1.3 **Group workshops**: Students are divided into small groups for hands-on training to identify diseases under instructor supervision, with defined roles and checklists.

	1.4 **Clinical case studies**: Present real or simulated cases for diagnostic analysis and treatment planning, emphasizing indications and contraindications for laser therapy. 1.5 **Interactive modern technologies**: Use augmented/virtual reality or simulators to represent diverse clinical cases and provide interactive training for diagnosis and procedures.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	3	Theoretical and practical knowledge	Laser in medicine (Define , Properties, Advantage with Disadvantages, Types of laser)	In presence	Quarterly and weekly tests.
Second	3		Laser in eye treatment (diseases in the eye, method of the treatment)		
Third	3		Laser in eye treatment (diseases in the eye, method of the treatment)		
Fourth	3		Laser effects on biological tissue,(thermal effect), (chemical ,Mechanical effects)		
Fifth	3		Laser effects on biological tissue,(thermal effect), (chemical ,Mechanical effects)		
Sixth	3		Co2 Laser (wave length = 10.6 nm)		
Seventh	3		Excimer Laser (wave length ( ).		
Eighth	3		ND- YAG Laser (Define , λ=1064 nm)		
Ninth	3		Properties of Diode Laser λ=810 nm to 110 nm.		

Tenth	3		Properties of Diode Laser λ=810 nm to 110 nm.		
eleventh	3		Side effects of Laser eye operation		
twelfth	3		Retinal Laser treatment (Define retina with properties)		
Thirteen	3		Argon Laser		
fourteen	3		Argon Laser		
fifteen	3		Revision		

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.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	Clinical Procedures In Primary Eye Care
Recommended books and references (scientific journals, reports...)	Clinical Procedures In Primary Eye Care
Electronic References, Websites	

Course Description Form

Optical Equipment 4 - Third Stage

1. Course Name:	
Optical Equipment 4	
2. Course Code:	
ATU13_VST_325CM	
3. Semester / Year:	
Second / 2025-2026	
4. Description Preparation Date:	
12/02/2026	
5. Available Attendance Forms:	
In presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6 hours per week / 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: karrar idan rashid	**Email: karrar.iraq56@gmail.com**
8. Course Objectives	
Course Objectives	1. The student should be knowledgeable about all optical devices and their usage. 2. The student should be able to operate the devices and understand how to maintain them.
9. Teaching and Learning Strategies	
Strategy	1. Demonstrative Lectures: The course instructor explains the operation, function, and maintenance of devices theoretically, accompanied by presentations and illustrative images. 2. Practical Demonstrations: The instructor showcases how the devices work to identify eye diseases or refractive errors and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to operate the devices under the supervision of the instructor. 4. Case Studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and deduce the types of diseases affecting the patient's eye and the appropriate treatment. 5. Use of Modern Technologies: Such as augmented reality or virtual reality to simulate different disease conditions and train students on diagnosing them interactively.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and practical knowledge	Diagnostic ultrasound.	In presence	Quarterly and weekly tests.
Second	6		Heidelberg retino-tomography (HRTH)		
Third	6		Optical carneal tomography (O.C.T)		
Fourth	6		Heidelberg analmascope.		
Fifth	6		Pachometery.		
Sixth	6		Pachometery.		
Seventh	6		Dark adaptometer.		
Eighth	6		Electroretinography: principle the wave, the b-wave, normal ERG.		
Ninth	6		Electroretinography: scotopic ERG., photo ERG.		
Tenth	6		Optical cataract tomog.		
eleventh	6		V.E.P		
twelfth	6		YAG laser.		
Thirteen	6		Argo Laser.		
Thirteen	6		Gonios cope.		
fourteen	6		Revision		

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.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	1.Clinical procedures in primary eye care 2.Binocular Vision & Orthoptics

	3.Clinical Optics and Vision Rehabilitation 4.Textbook of Visual Science and Clinical Optometry 5.Borish's Clinical Refractio 6.Practical Ophthalmology (American academy of ophthalmology) 7.A Practical Guide on Refraction
Recommended books and references (scientific journals, reports...)	- Practical Ophthalmology (American academy of ophthalmology) - Textbook of Visual Science and Clinical Optometry - Borish's Clinical Refractio
Electronic References, Websites	

Course Description Form

Optical Equipment 2 - Second Stage

1. Course Name:	
Optical Equipment 2	
2. Course Code:	
ATU13_VST_222CM	
3. Semester / Year:	
Second / 2025-2026	
4. Description Preparation Date:	
12/02/2026	
5. Available Attendance Forms:	
In presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
7 hours per week / 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Hawraa Hadi and karrar idan rashid	**Email: karrar.iraq56@gmail.com**
8. Course Objectives	
Course Objectives	1. The student should be knowledgeable about all optical devices and their usage. 2. The student should be able to operate the devices and understand how to maintain them.
9. Teaching and Learning Strategies	
Strategy	1. Demonstrative Lectures: The course instructor explains the operation, function, and maintenance of devices theoretically, accompanied by presentations and illustrative images. 2. Practical Demonstrations: The instructor showcases how the devices work to identify eye diseases or refractive errors and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to operate the devices under the supervision of the instructor. 4. Case Studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and deduce the types of diseases affecting the patient's eye and the appropriate treatment. 5. Use of Modern Technologies: Such as augmented reality or virtual reality to simulate different disease conditions and train students on diagnosing them interactively.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	7	Theoretical and practical knowledge	Revision	• In presence	Quarterly and weekly tests.
Second	7		Lensometer		
Third	7		Fundus Camera		
Fourth	7		External Eye Photography		
Fifth	7		Indirect Ophthalmoscope		
Sixth	7		Direct Ophthalmoscope		
Seventh	7		Corneal Examination - Placido Disc		
Eighth	7		Corneal Examination- Keratometer		
Ninth	7		Corneal Examination- Keratometer		
Tenth	7		Corneal Examination- VKG		
eleventh	7		Corneal Examination- Speclar Microscopy		
twelfth	7		Corneal Examination- Aesthesiometer		
Thirteen	7		Corneal Topographer		
Thirteen	7		Corneal Topographer		
fourteen	7		Revision		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad

Main references (sources)	1.Step by Step Reading Pentacam Topography 2.Binocular Vision & Orthoptics 3.Clinical Optics and Vision Rehabilitation 4.Textbook of Visual Science and Clinical Optometry 5.Borish's Clinical Refractio 6.The Retinoscopy Book
Recommended books and references (scientific journals, reports...)	- Textbook of Visual Science and Clinical Optometry - Borish's Clinical Refractio
Electronic References, Websites	

Course Description: Human Rights and Democracy

1. Course Name
Human Rights and Democracy
2. Course Code
ATU13
3. Course Code
First Semester / firstYear
4. Date of Preparing this Description
2025\12\21
5. Available Attendance Forms
In-person (On-campus)
6. Total Study Hours / Total Units
Total Hours: (30) Total Units: (2)
7. Course Coordinator
Name: Asst. Lecturer Mohand Jumaah Mahdi
8. Course Objectives
General Objective.: To enhance understanding of the principles of human dignity, fundamental freedoms, and mechanisms of political participation in order to achieve a just society that respects the rule of law and the rights of all individuals without discrimination. Specific Objectives: .1 To identify the legal framework of human rights. .2 To develop the ability to advocate for rights. .3 To promote the values of tolerance, equality, and non-discrimination.

4. To identify and expose human rights violations.

9. Teaching and Learning

Strategies

- •Cooperative Learning Strategy
- • Brainstorming Strategy
- • Cooperative Concept Mapping Strategy
- • Real-Time Feedback Strategy
- • Feedback Chain Strategy
- • Opinion Exchange and Discussion Strategy

10. Course Structure

Evaluation Method	Teaching Method	Unit/topic	Intended Learning Outcomes	hours	Week
Daily exams (or & written), reports, discussions	Theoretical	Introduction to Human Rights		٢	1
Daily exams (oral & written), reports, discussions	Theoretical	Concept of Human Rights		٢	2
Daily exams (oral & written), reports, discussions	Theoretical	Concept of the International Bill of Rights		٢	3
Daily exams (oral & written), reports, discussions	Theoretical	Group and Special Rights		٢	4
Daily exams (oral & written), reports, discussions	Theoretical	Gross Violations of Human Rights		٢	5

Daily exams (oral & written), reports, discussions	Theoretical	Gross Human Rights Violations in Iraq		٢	6
Daily exams (oral & written), reports, discussions	Theoretical	Human Rights Council		٢	7
Daily exams (oral & written), reports, discussions	Theoretical	Mechanisms of the Human Rights Council		٢	8
Daily exams (oral & written), reports, discussions	Theoretical	Contemporary Challenges in Human Rights		٢	9
Daily exams (oral & written), reports, discussions	Theoretical	Democracy: Concept and Development		٢	10
Daily exams (oral & written), reports, discussions	Theoretical	Types of Democracy and Their Development		٢	11
Daily exams (oral & written), reports, discussions	Theoretical	Democratic Institutions and Mechanisms		٢	12
Daily exams (oral & written), reports, discussions	Theoretical	Democracy in Practice		٢	13
Daily exams (oral & written), reports, discussions	Theoretical	Comparative Democratic Systems		٢	14
Daily exams (oral & written), reports, discussions	Theoretical	The Democratic Experience in Iraq		٢	15

11. Course Assessment

Coursework (Theoretical): 30%

Final Examination: 70%

12. Teaching and Learning Resources

	Required Textbooks

	)As prescribed in the curriculum(
Human Rights Book	Main References
	Recommended Supporting References)Scientific journals, reports, etc(.
	Electronic References Websites and online resources

Course Description: Crimes of the Ba'ath Regime in Iraq

1. Course Name
Crimes of the Defunct Baath party
2. Course Code
ATU24
3. Course Code
First Semester / Second Year
4. Date of Preparing this Description
21/122025/
5. Available Attendance Forms
In-person (On-campus(
6. Total Study Hours / Total Units
Total Hours: (30(Total Units: (2(
7. Course Coordinator
Name: Asst. Lecturer Mohand Jumaah Mahdi
8. Course Objectives
General Objective:To understand the crimes and atrocities committed by the criminal Ba'ath regime against the Iraqi people. Specific Objectives: .1 To identify the crimes criminalized by the Iraqi Criminal Court against the Ba'ath regime. .2 To recognize the types of psychological crimes committed by the former regime. .3 To understand the forms of human rights violations and crimes of authority. .4 To identify the types of environmental crimes committed by the Ba'ath regime

9. Teaching and Learning

Strategies
•Cooperative Learning Strategy • Brainstorming Strategy • Cooperative Concept Mapping Strategy • Real-Time Feedback Strategy • Chain Notes Strategy • Discussion and Exchange of Opinions Strategy • Information Presentation Strategy

10. Course Structure

Evaluation Method	Teaching Method	Unit/topic	Intended Learning Outcomes	hours	Week
Daily exams (or & written), reports, discussions	Theoretical	Introduction and definition of the crimes of the Ba'ath regime according to the Iraqi Criminal Court (2005)		٢	1
Daily exams (oral & written), reports, discussions	Theoretical	InternationalCrimes		٢	2
Daily exams (oral & written), reports, discussions	Theoretical	Psychological Crimes		٢	3
Daily exams (oral & written), reports, discussions	Theoretical	Social Crimes		٢	4
Daily exams (oral & written), reports, discussions	Theoretical	The Ba'ath Regime's Position Toward Religion		٢	5

Daily exams (oral & written), reports, discussions	Theoretical	Forms of Human Rights Violations and Crimes of Authority		٢	6
Daily exams (oral & written), reports, discussions	Theoretical	Political and Military Violation Decisions		٢	7
Daily exams (oral & written), reports, discussions	Theoretical	Prisons and Detention Facilities of the Ba'ath Regime		٢	8
Daily exams (oral & written), reports, discussions	Theoretical	Environmental Crimes of the Ba'ath Regime in Iraq		٢	9
Daily exams (oral & written), reports, discussions	Theoretical	War and Radioactive Pollution and Landmine Explosions		٢	10
Daily exams (oral & written), reports, discussions	Theoretical	Destruction of Cities and Villages (Scorched Earth Policy)		٢	11
Daily exams (oral & written), reports, discussions	Theoretical	Draining of the Marshes		٢	12
Daily exams (oral & written), reports, discussions	Theoretical	Bulldozing Orchards, Trees, and Crops		٢	13
Daily exams (oral & written), reports, discussions	Theoretical	Mass Graves Crimes		٢	14
Daily exams (oral & written), reports, discussions	Theoretical	Chronological Classification of Genocide Mass Graves in Iraq (1963–2003)		٢	15

11. Course Assessment

Coursework (Theoretical): 30%

Final Examination: 70%

12. Teaching and Learning Resources

	Required Textbooks)As prescribed in the curriculum(
Crimes of the Ba'ath Regime in Iraq	Main References
	Recommended Supporting References)Scientific journals, reports, etc(.
	Electronic References Websites and online resources

Course Description Form

Optical Equipment 3 - third Stage

1. Course Name:
Optical Equipment 3
2. Course Code:
ATU13_VST_315CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
05/11/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **karrar idan rashid** **Email: karrar.iraq56@gmail.com**
8. Course Objectives

Course Objectives	1. The student should be knowledgeable about all optical devices and their usage. 2. The student should be able to operate the devices and understand how to maintain them.
9. Teaching and Learning Strategies	
Strategy	1. Demonstrative Lectures: The course instructor explains the operation, function, and maintenance of devices theoretically, accompanied by presentations and illustrative images. 2. Practical Demonstrations: The instructor showcases how the devices work to identify eye diseases or refractive errors and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to operate the devices under the supervision of the instructor. 4. Case Studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and deduce the types of diseases affecting the patient's eye and the appropriate treatment. 5. Use of Modern Technologies: Such as augmented reality or virtual reality to simulate different disease conditions and train students on diagnosing them interactively.
10 Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	6	Theoretical and Practical knowledge	Colour vision test: Ishihara, hardy -Rand-Ritter.	•In presence	Quarterly and weekly tests.
Second	6		Colour vision test: city university, farn sworth-munsell 100 hve-		
Third	6		Contract sensitivity. The Peli-roboson contrast sensitivity letter		
Fourth	6		Amsler grid.		
Fifth	6		Dark adaptometery: definition, indication, Gold Mann-weeks adaptometery.		
Sixth	6		Dark adaptometery: sensitivity curve, cone branch, rod branch break, rod branch.		
Seventh	6		Orthoptic examination instruments, haloscope, home devices.		
Eighth	6		Bagolini striated glasses.		
Ninth	6		Synaptophore		
Tenth	6		Synaptophore		
eleventh	6		Maddox wing , Maddox rod		
twelfth	6		Exophthalmometer		
Thirteen	6		Perimeter manual and automated.		
Thirteen	6		Perimeter manual and automated.		
fourteen	6		Frequency doubling perimeter		
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.	
1.6 12Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	1.Clinical procedures in primary eye care 2.Binocular Vision & Orthoptics 3.Clinical Optics and Vision Rehabilitation 4.Textbook of Visual Science and Clinical Optometry 5.Borish's Clinical Refractio 6.Practical Ophthalmology (American academy of ophthalmology) 7.A Practical Guide on Refraction
Recommended books and references (scientific journals, reports...)	- Practical Ophthalmology (American academy of ophthalmology) - Textbook of Visual Science and Clinical Optometry - Borish's Clinical Refractio
Electronic References, Websites	

Course Description Form

Ocular manifestation of systemic diseases (2)

1 Course Name:
Ocular manifestation of systemic diseases (2)
2 Course Code:
ATU13_VST_321CM
3 Semester / Year:
Sessional /2025-2026
4 Description Preparation Date:
10/1/2026
5 Available Attendance Forms:
In presence
6 Number of Credit Hours (Total) / Number of Units (Total)
48/3
7. Course administrator's name (mention all, if more than one name)
Optometristalaa02@gmail.com :Name: Alaa Mohammad AbdulAbbas Email:
8. Course Objectives

Course Objectives	General Aim **To provide students with theoretical knowledge related to ocular problems associated with systemic diseases, and to enhance the understanding of the relationship between general medical conditions and eye health.** Specific Objectives **By the end of the theoretical lectures, the student is expected to able to:** 1. **Define the relationship between systemic diseases and ocular health.** 2. **Classify common ocular problems resulting from system disorders such as:** ○ **Diabetes mellitus** ○ **Hypertension**

	○ Thyroid gland diseases ○ Hematological diseases 3. Identify the clinical signs and symptoms associated with each systemic condition affecting the eye. 4. Recognize the theoretical diagnostic approaches used in the evaluation of ocular problems related to systemic disorders

9. Teaching and Learning Strategies

Strategy	roposed Teaching and Learning Strategies for Ocular Problems Related to Systemic Disorders Teaching and Learning Strategies 1. Practical Application Encouraging students to observe common systemic disease cases and relate them to clinical practice through hands-on exercises and real-life case scenarios. The use of clinical images is emphasized to enable students to recognize ocular manifestations through applied learning. 2. Visual Aids Utilizing images, diagrams, and educational videos to facilitate understanding, enhance visual recognition, and improve long-term retention of information. 3. Symbols and Visual Representation Introducing commonly used medical terms, abbreviations, and symbols related to systemic and ocular conditions to support memory and rapid identification. 4. Repetition and Practice Reinforcing learning by repeatedly using medical terminology and clinical concepts in different contexts to strengthen comprehension and recall. 5. Contextual Understanding Linking medical terminology and ocular conditions to their clinical and pathological context in order to deepen understanding and promote meaningful learning. 6. Clinical Skills Training Organizing simulated training sessions that reflect real medical and clinical scenarios to enhance students' practical experience and clinical reasoning skills. 7. Continuous Assessment Implementing short quizzes, formative assessments, and interactive activities to regularly evaluate students' level of understanding and learning progress.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	6	Theoretical and practical knowledge	1-**Trauma to the eye , lids, foreign body.**	In presence	Quarterly and weekly tests
2	6	Theoretical and practical knowledge	**2-Truma , chemical injuries .**	In presence	Quarterly and weekly tests
3	6	Theoretical and practical knowledge	3-**Diabetic eye disease, pathophysiology.**	In presence	Quarterly and weekly tests
4	6	Theoretical and practical knowledge	4-**Diabetic eye complications.**	In presence	Quarterly and weekly tests
5	6	Theoretical and practical knowledge	5-**Hypertention** **thophysiology.**	In presence	Quarterly and weekly tests
6	6	Theoretical and practical knowledge	**Hypertensive eye disease.**	In presence	Quarterly and weekly tests
7	6	Theoretical and practical knowledge	**Ocular side effects of systemic medication.**	In presence	Quarterly and weekly tests
8	6	Theoretical and practical knowledge	**yroid eye disease ,Thyroid gland anatomy and physiology**	In presence	Quarterly and weekly tests
9	6	Theoretical and practical knowledge	**Ocular manifestations associated with thyroid gland problems**	In presence	Quarterly and weekly tests
10	6	Theoretical and practical knowledge	cular manifestations associated with od disorders ,sickle cell anemia and halassaemia, Blitiyscarasis &Tumor	In presence	Quarterly and weekly tests
11	6	Theoretical and practical knowledge	**Ocular manifestations accociated with blood disorders, retinal nous occlusive disease and retinal arterial occlusive disease.**	In presence	Quarterly and weekly tests
12	6	Theoretical and practical knowledge	**Ocular manifestations associated with systemic infections , viral , bacterial, fungal and autoimmune diseases.**	In presence	Quarterly and weekly tests
13	6	Theoretical and practical knowledge	**Ocular manifestations in neurological disorders.**	In presence	Quarterly and weekly tests
14	6	Theoretical and practical knowledge	**phthalmic manifestations of systemic neoplasia.**		

15	6	Theoretical and practical knowledge	.Revision.	In presence	Quarterly and weekly tests

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	It's not available now
references (sources)	-Kanski's Clinical Ophthalmology: A Systematic Approach Jack J. Kansk· 2-Endocrine diseases ,Autoimmune diseas Neurological & systemic disorders, Ocular manifestations of systemic diseases, Pathophysiology + clinical findings 3- Ocular Manifestations of Systemic Disease *British Journal of Ophthalmology* *Ophthalmology Journal* قسم تقنيات فحص البصر
Recommended books and references (scientific journals, reports...)	Kanski's Clinical Ophthalmology: A Systematic Approach .Jack J. Kansk Endocrine diseases ,Autoimmune diseas- Neurological & systemic disorders, Ocular manifestations of systemic diseases, Pathophysiology + clinical findings Ocular Manifestations of Systemic Disease •British Journal of Ophthalmology Ophthalmology Journal • Survey of Ophthalmology
Electronic References, Websites	EyeWiki (American Academy of Ophthalmology https://eyewiki.org/Main_Page?utm_source=chatgpt.com AAO Eye Health A-Z (American Academy of Ophthalmology ophthalmology-lectures/video-detail/chapter-9-ocular-manifestations-systemic-disease

	https://www.aao.org/medical-students/basic-ophthalmology-lectures/video-detail/chapter-9-ocular-manifestations-systemic-disease?utm_source=chatgpt.com **Ocular Manifestations of Systemic Diseases** **MDPI (Journal of Clinical Medicine)** https://www.mdpi.com/journal/jcm/topical_collections/9IZ8GJ28F8?utm_source=chatgpt.com Ocular Manifestations of Systemic Infectionshttps://eyesoneyecare.com/resources/ocular-manifestations-systemic-infections/?utm_source=chatgpt.com

Course Description Form

Optical Equipment 1 - Second Stage

1	Course Name:
Optical Equipment 1	
2	Course Code:
	ATU13_VST_212CM
3	Semester / Year:
First / 2025-2026	
4	Description Preparation Date:
05/11/2025	
5	Available Attendance Forms:
In presence	
6	Number of Credit Hours (Total) / Number of Units (Total)
7	**hours per week / 4 units**
7Course administrator's name (mention all, if more than one name)	
Name: **Hawraa Hadi and karrar idan rashid**	Email: karrar.iraq56@gmail.com
8	Course Objectives
Course Objectives	1. The student should be knowledgeable about all optical devices and their usage. 2. The student should be able to operate the devices and understand how to maintain them.
9	Teaching and Learning Strategies
Strategy	1. Demonstrative Lectures: The course instructor explains the operation, function, and maintenance of devices theoretically, accompanied by presentations and illustrative images. 2. Practical Demonstrations: The instructor showcases how the devices work to identify eye diseases or refractive errors and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to operate the devices under the supervision of the instructor. 4. Case Studies: Clinical cases of patients with various diseases are presented, and students are asked to analyze the case and deduce the types of diseases affecting the patient's eye and the appropriate treatment. 5. Use of Modern Technologies: Such as augmented reality or virtual reality to simulate different disease conditions and train students on diagnosing them interactively.

10 Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
First	7	Theoretical and practical knowledge	Introduction and general information	In presence	Quarterly and weekly tests.
Second	7		General consideration for maintaining ophthalmic instruments		
Third	7		Ophthalmic instruments decontamination		
Fourth	7		Risk of transmission of infection in devices		
Fifth	7		Risk of transmission of infection in devices		
Sixth Seventh	7		Test charts and trial case and frame1		
Eighth	7		Test charts and trial case and frame2		
Ninth	7		Retinoscopy		
Tenth	7		Auto refractometer		
eleventh	7		Auto refractometer		
twelfth	7		Tonometer types , contact and non-contact1		
Thirteen	7		Tonometer types , contact and non-contact2		
Thirteen	7		Tonometer types , contact and non-contact3		

fourteen	7		Lensometer		

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.	
12 Learning and Teaching Resources	
Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	1.Step by Step Reading Pentacam Topography 2.Binocular Vision & Orthoptics 3.Clinical Optics and Vision Rehabilitation 4.Textbook of Visual Science and Clinical Optometry 5.Borish's Clinical Refractio 6.The Retinoscopy Book
Recommended books and references (scientific journals, reports...)	- Textbook of Visual Science and Clinical Optometry - Borish's Clinical Refractio
Electronic References, Websites	

Course Description Form

Refractive Errors 2 - Second Stage

1 Course Name:
Refractive errors (2)
2 Course Code:
ATU13_VST_224CM
3 Semester / Year:
Second / 2025-2026
4 Description Preparation Date:
01/02/2026
5 Available Attendance Forms:
In presence
6 Number of Credit Hours (Total) / Number of Units (Total)
3 **hours / 4 units**
7Course administrator's name (mention all, if more than one name)
Name: **Hassan Abdulhadi Jasim Aljaberi** Email: **hassan.abdulhadi@uomus.edu.iq**

7 Course Objectives	
Course Objectives	**1. Introducing students to the common types of refractive errors, such as myopia, farsightedness, and astigmatism, and helping them understand their causes and mechanisms of occurrence.** **2. Train students to use various devices and equipment, such as the retinoscope and autorefractometer, to measure and monitor refractive errors.** **3. Providing students with practical skills in determining the type of refractive error in a patient through eye examination and analyzing the results.** **4. Identify the different methods of correcting refractive errors, such as eyeglasses, contact lenses, and corrective surgeries.**
8 Teaching and Learning Strategies	

Strategy	1. Explanatory lectures: where the teacher explains the types of refractive errors, their causes, and their mechanisms in a theoretical manner, accompanied by presentations and illustrative pictures. 2. Practical presentations: The teacher shows how to use different devices to measure refractive errors, such as the retinoscope and the autorefractometer, and explains how to interpret the results. 3. Workshops: Students are divided into small groups, and they practice using devices and measuring refractive errors under the teacher's supervision. 4. Clinical case study: Clinical cases of different patients with various refractive errors are presented, and students are asked to analyze the case and conclude the type of refractive error and appropriate treatment. 5. Using modern technologies, such as augmented or virtual reality, to simulate cases of different refractive errors and train students to diagnose them interactively.

9 Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Theoretical and practical knowledge	Strabismus (definition) Strabismus (type and diagnosis) Strabismus (correlation) Definition of Low vision and types Instrument and devices uses in low vision Test of low vision (V.A for far and Near) Visual field Magnification	attendance includes: - • Develop students' ability to communicate and interact with patients to explain their condition and treatment options clearly. • Enhancing students' thinking and analytical skills by studying clinical cases and practical examples of different refractive errors.	Students' performance is continuously evaluated during practical lessons through quizzes, assignments, and practical reports.
Second	4				
Third	4				
Fourth	4				
Fifth	4				
Sixth	4				
Seventh	4				
Eighth	4				
Ninth	4				
Tenth	4				

eleventh	**4**		**Color blindness 1**		
twelfth	**4**		**Color blindness 2**		
Thirteenth	**4**		**Writing prescription**		
fourteenth	**4**		**Reading prescription**		
			Transposition 1		
			Transposition 2		

10 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.

11 Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. **American Journal of Ophthalmology** 2. **Journal of Refractive Surgery**
Main references (sources)	**American Academy of Ophthalmology (AAO)**
Recommended books and references (scientific journals, reports...)	**Optometrist Guide by Hassan A. Aljaberi**
Electronic References, Websites	1. **EyeWiki (https://eyewiki.aao.org/Refractive_Errors)** 2. **All About Vision** (https://www.allaboutvision.com/resources/refractive-errors.)

Course Description Form

Refractive Errors 4 - Third Stage

1. Course Name:
Refractive errors (4)
2. Course Code:
ATU13_VST_324CM
3. Semester / Year:
Second / 2025-2026
4. Description Preparation Date:
01/02/2026
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
4 hours / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Hassan Abdulhadi Jasim Aljaberi** Email: **hassan.abdulhadi@uomus.edu.iq**
8. Course Objectives

Course Objectives	**5. Introducing students to the common types of refractive errors, such as myopia, farsightedness, and astigmatism, and helping them understand their causes and mechanisms of occurrence.** **6. Train students to use various devices and equipment, such as the retinoscope and autorefractometer, to measure and monitor refractive errors.** **7. Providing students with practical skills in determining the type of refractive error in a patient through eye examination and analyzing the results.** **8. Identify the different methods of correcting refractive errors, such as eyeglasses, contact lenses, and corrective surgeries.**

9. Teaching and Learning Strategies

Strategy	6. Explanatory lectures: where the teacher explains the types of refractive errors, their causes, and their mechanisms in a theoretical manner, accompanied by presentations and illustrative pictures. 7. Practical presentations: The teacher shows how to use different devices to measure refractive errors, such as the retinoscope and the autorefractometer, and explains how to interpret the results. 8. Workshops: Students are divided into small groups, and they practice using devices and measuring refractive errors under the teacher's supervision. 9. Clinical case study: Clinical cases of different patients with various refractive errors are presented, and students are asked to analyze the case and conclude the type of refractive error and appropriate treatment. 10. Using modern technologies, such as augmented or virtual reality, to simulate cases of different refractive errors and train students to diagnose them interactively.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Theoretical and practical knowledge	Introduction of Astigmatism Etiology of Astigmatism Signs and Symptoms of Astigmatism Types of Astigmatism Treatment of Astigmatism Anisometropia Aniseikonia Aphakia Etiology of Presbyopia	attendance includes: - • Develop students' ability to communicate and interact with patients to explain their condition and treatment options clearly. • Enhancing students' thinking and analytical skills by studying clinical cases and practical examples of different refractive errors.	Students' performance is continuously evaluated during practical lessons through quizzes, assignments, and practical reports.
Second	4				
Third	4				
Fourth	4				
Fifth	4				
Sixth	4				
Seventh	4				
Eighth	4				
Ninth	4				
Tenth	4				

eleventh	**4**		**Signs and Symptoms of Presbyopia**		
twelfth	**4**		**Treatment of Presbyopia**		
Thirteenth	**4**		**Amblyopia definition**		
fourteenth	**4**		**Amblyopia treatment**		
			Eye Strain		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Text book of visual science and clinical optometry By Bikas Bahttacharyya
Main references (sources)	Clinical pearls for optometry By Roger F.Filips
Recommended books and references (scientific journals, reports...)	Optometry magazines of American ophthalmology and optometry acadimy
Electronic References, Websites	

Course Description Form

Refractive Errors 1 - Second Stage

1. Course Name:
Refractive errors (1)
2. Course Code:
ATU13_VST_214CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
01/12/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
4 hours / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Hassan Abdulhadi Jasim Aljaberi** Email: **hassan.abdulhadi@uomus.edu.iq**
8. Course Objectives

Course Objectives	**9. Introducing students to the common types of refractive errors, such as myopia, farsightedness, and astigmatism, and helping them understand their causes and mechanisms of occurrence.** **10. Train students to use various devices and equipment, such as the retinoscope and autorefractometer, to measure and monitor refractive errors.** **11. Providing students with practical skills in determining the type of refractive error in a patient through eye examination and analyzing the results.**

	12. Identify the different methods of correcting refractive errors, such as eyeglasses, contact lenses, and corrective surgeries.

9. Teaching and Learning Strategies

Strategy	11. Explanatory lectures: where the teacher explains the types of refractive errors, their causes, and their mechanisms in a theoretical manner, accompanied by presentations and illustrative pictures. 12. Practical presentations: The teacher shows how to use different devices to measure refractive errors, such as the retinoscope and the autorefractometer, and explains how to interpret the results. 13. Workshops: Students are divided into small groups, and they practice using devices and measuring refractive errors under the teacher's supervision. 14. Clinical case study: Clinical cases of different patients with various refractive errors are presented, and students are asked to analyze the case and conclude the type of refractive error and appropriate treatment. 15. Using modern technologies, such as augmented or virtual reality, to simulate cases of different refractive errors and train students to diagnose them interactively.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Theoretical and practical knowledge	Light	attendance includes: - • Develop students' ability to communicate and interact with patients to explain their condition and treatment options clearly. • Enhancing students' thinking and analytical skills by studying clinical cases and practical examples	Students' performance is continuously evaluated during practical lessons through quizzes, assignments, and practical reports.
Second	4		Mirror & lens		
Third	4		Refractive error (RE)		
Fourth	4		Myopia		
Fifth	4		Myopia (sign & symptoms)		
Sixth	4		Hypermetropia		
Seventh	4		Hypermetropia (sign & symptoms)		
Eighth	4		Visual acuity (VA)		

Ninth	**4**		**Trial case**	**of different refractive errors.**	
Tenth	**4**		**Retinoscope I**		
eleventh	**4**		**Retinoscope II**		
twelfth	**4**		**Astigmatism I**		
Thirteenth	**4**		**Astigmatism II**		
fourteenth	**4**		**Astigmatism (sign & symptoms)**		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	3. **American Journal of Ophthalmology** 4. **Journal of Refractive Surgery**
Main references (sources)	**American Academy of Ophthalmology (AAO)**
Recommended books and references (scientific journals, reports...)	**Optometrist Guide by Hassan A. Aljaberi**
Electronic References, Websites	3. **EyeWiki (https://eyewiki.aao.org/Refractive_Errors)** 4. **All About Vision** (https://www.allaboutvision.com/resources/refractive-errors.)

Course Description Form

Refractive Errors 3 - Third Stage

1. Course Name:
Refractive errors (3)
2. Course Code:
ATU13_VST_314CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
01/12/2025
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
4 hours / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Hassan Abdulhadi Jasim Aljaberi** Email: **hassan.abdulhadi@uomus.edu.iq**
8. Course Objectives

Course Objectives	**13. Introducing students to the common types of refractive errors, such as myopia, farsightedness, and astigmatism, and helping them understand their causes and mechanisms of occurrence.** **14. Train students to use various devices and equipment, such as the retinoscope and autorefractometer, to measure and monitor refractive errors.** **15. Providing students with practical skills in determining the type of refractive error in a patient through eye examination and analyzing the results.** **16. Identify the different methods of correcting refractive errors, such as eyeglasses, contact lenses, and corrective surgeries.**
9. Teaching and Learning Strategies	

Strategy	16. Explanatory lectures: where the teacher explains the types of refractive errors, their causes, and their mechanisms in a theoretical manner, accompanied by presentations and illustrative pictures. 17. Practical presentations: The teacher shows how to use different devices to measure refractive errors, such as the retinoscope and the autorefractometer, and explains how to interpret the results. 18. Workshops: Students are divided into small groups, and they practice using devices and measuring refractive errors under the teacher's supervision. 19. Clinical case study: Clinical cases of different patients with various refractive errors are presented, and students are asked to analyze the case and conclude the type of refractive error and appropriate treatment. 20. Using modern technologies, such as augmented or virtual reality, to simulate cases of different refractive errors and train students to diagnose them interactively.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First Second Third Fourth Fifth Sixth Seventh Eighth Ninth Tenth	4 4 4 4 4 4 4 4 4 4	Theoretical and practical knowledge	Introduction of Astigmatism Etiology of Astigmatism Signs and Symptoms of Astigmatism Types of Astigmatism Treatment of Astigmatism Anisometropia Aniseikonia Aphakia Etiology of Presbyopia	attendance includes: - • Develop students' ability to communicate and interact with patients to explain their condition and treatment options clearly. • Enhancing students' thinking and analytical skills by studying clinical cases and practical examples of different refractive errors.	Students' performance is continuously evaluated during practical lessons through quizzes, assignments, and practical reports.

eleventh	**4**		**Signs and Symptoms of Presbyopia**		
twelfth	**4**		**Treatment of Presbyopia**		
Thirteenth	**4**		**Amblyopia definition**		
fourteenth	**4**		**Amblyopia treatment**		
			Eye Strain		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Text book of visual science and clinical optometry By Bikas Bahttacharyya
Main references (sources)	Clinical pearls for optometry By Roger F.Filips
Recommended books and references (scientific journals, reports...)	Optometry magazines of American ophthalmology and optometry acadimy
Electronic References, Websites	

Course Description Form

Squint 1 – 3rd Stage

1. Course Name:
Squint 1
2. Course Code:
ATU13_VST_313CM
3. Semester / Year:
First / 2025-2026
4. Description Preparation Date:
14/2/2026
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
6 hours per week / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Dr. Amir Muhammad Hadi** Email:
8. Course Objectives

Knowledge	A1	The student is able to understand the theoretical framework of the subject of strabismus a identify its types and causes in detail
	A2	Understand the difference between each type of strabismus, its causes and treatment
	A3	Understand how to use modern methods in treating strabismus and its associated diseases s as lazy eye
	A4	The student is able to diagnose all types of strabismus and how to treat it
Skills	B1	The student is able to examine a strabismus patient
	B2	The student is able to use devices for strabismus patients
	B3	The student is able to meet the needs of the patient and treat him

	B4	The student is able to use modern methods in treating strabismus and associated diseases
Values	**C1**	Reinforcing scientific values and principles in the student and emphasizing the importance of studies and specialization
	C2	Emphasizing the student's personal characteristics such as integrity, honesty and ethics
	C3	Instilling a love of work and creativity and its importance in the labor market
	C4	Clarifying the importance of adhering to the professional and ethical standards of accounting and auditing profession

9. Teaching and Learning Strategies

1.	Encouraging students to discuss topics related squint.	**3.**	. 1. Encourage students to discuss topics related to strabismus 4. Deepen understanding of the treatment process for strabismus patients and how to diagnose it early
2.	2. Enabling the student to choose the appropriate method for treating strabismus	**4.**	Providing up-to-date scientific resources.

10. Course Structure

Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
First	6	Theoretical and practical knowledge	Anatomy and physiology of extra ocular muscles	In presence	Quarterly and weekly tests.
Second	6		sensory physiology and pathology: the physiology of normal binocular vision, suppression,		
Third	6		Retinal correspondence (normal versus Anomalous), monofixation syndrome		
Fourth	6		Binocular eye movement, Definitions, Simultaneous perception Fusional mechanism, Stereopsis		

Fifth	6		Amblyopia-1: Definitions, Classification, Detection and Screening Evaluation		
Sixth	6		Amblyopia-2: Detailed treatment plans		
Seventh	6		Management of. Refractive. Error in childhood		
Eighth	6		introduction to Strabismus: Definitions, Types (Classifications) Terminology related to it		
Ninth	6		Laws of Ocular Motility		
Tenth	6		Esotropia-1: Definition, types, pseudoesotropia, congenital esotropia (from diagnosis to management)		
eleventh	6		Esotropia-1: Definition, types, pseudoesotropia, congenital esotropia (from diagnosis to management)		
twelfth	6		Esotropia-2: Accommodative esotropia (classification, presentation diagnosis, and management)		
Thirteen	6		Esotropia-3: Acquired non-accommodative esotropia (types presentation, diagnosis, and management)		
fourteen	6		Esotropia-4: Incomitant esotropia; types, focusing on Sixth Nerve Palsy		
fifteen	6		Review		

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.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	College of Health and Medical Techniques/ Baghdad
Main references (sources)	**AMERICAN ACADEMY ASSOCIATION AAO 2024**
Recommended books and references (scientific journals, reports...)	Journals and research in the field of strabismus
Electronic References, Websites	

Course Description Form

Head &neck anatomy 1 - first Stage

1. Course Name:
Anatomy of head and neck
2. Course Code:
ATU13_VST_111CM
3. Semester / Year:
first / 2025-2026 first year
4. Description Preparation Date:
13/2/2026
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
5 hours practical 2 theoretical / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Muzaffar Adnan Yahya** Email : muzafar.alsabari@atu.edu.iq

8. Course Objectives	
Course Objectives	To study the anatomy of the eye parts and their functions.

9. Teaching and Learning Strategies	
Strategy	1. Explanatory lectures: The professor explains the eye anatomy , accompanied by presentations and illustrative images. 2. Practical presentations: The professor takes illustrative images to identify eye anatomy or functions. and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to identify eye anatomy under the supervision of the professor.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

First	5	practical knowledge	**Description of anatomical terms:** Definition, classification, types.	• In presence	Quarterly and weekly tests.
Second	5		**Anatomy of skull**: Clinical presentation, definition, classification, types.		
Third	5		**Anatomy of brain**: Clinical presentation, definition, classification, functions		
Fourth	5		**Blood vessels, muscles, skin:** Definition, classification. Functions		
Fifth	5		**Anatomy of bones**: Clinical presentation, classification.		
Sixth	5		**Joint :** definition, classification.		
Seventh	5		**Scalp**: Definition, function.		
Eighth	5		**Blood brain supply**: Definition, explanation, function.		
Ninth	5		**Face (muscles of face paranasal sinus):** Definition, classification, function.		
Tenth	5		**Face (sensory, skin, blood supply:** Definition, classification, function.		
eleventh	5		**Face (mandibular, temporomandibular joint):** Definition, classification, function		
twelfth	5		**Cranial nerves:** Definition, classification, function.		

Thirteen	5		**Neck anatomy (arteries, veins, lymph, nerves, bones):** definition, classification, function.		
fourteen	5		**Trunk and shoulder anatomy:** definition, classification, function		
fifteen	5		**Revision**		

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.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	1.Clinical Head and Neck Anatomy for Surgeons. Edited by Peter A.Brennan, Vishy Mahadevan , Barrie T Evan. 2016.
Main references (sources)	2. Illustrated Anatomy of the Head and Neck. By Susan W. Herring, 1995.
Recommended books and references (scientific journals, reports...)	3. Textbook of Head and Neck Anatomy. By James L Hiatt PhD 1982
Electronic References, Websites	

Course Description Form

Eye anatomy 2 - first Stage

1. Course Name:
Anatomy of eye
2. Course Code:
ATU13_VST_121CM
3. Semester / Year:
Second / 2025-2026 first year
4. Description Preparation Date:
14/02/2026
5. Available Attendance Forms:
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
5 hours practical 2 theoretical / 4 units
7. Course administrator's name (mention all, if more than one name)
Name: **Muzaffar Adnan Yahya** Email: : muzafar.alsabari@atu.edu.iq

Course Objectives .8	
Course Objectives	To study the anatomy of the eye parts and their functions.

9. Teaching and Learning Strategies	
Strategy	1. Explanatory lectures: The professor explains the eye anatomy , accompanied by presentations and illustrative images. 2. Practical presentations: The professor takes illustrative images to identify eye anatomy or functions, and explains how to interpret the results. 3. Workshops: Students are divided into small groups and trained on how to identify eye anatomy under the supervision of the professor.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	5		**Anatomy of Eye:**	• In presence	

		practical knowledge	Definition, classification, function.		Quarterly and weekly tests.
Second	5		**Lacrimal apparatus**: Definition, classification, function.		
Third	5		**The Orbit:** Definition, classification, function.		
Fourth	5		**Muscles of the Orbit:** Definition, classification, function.		
Fifth	5		**Nerves of the orbit:** Definition, classification, function.		
Sixth	5		**Layers of the eye:** Definition, classification, function.		
Seventh	5		**Function of each layer of the eye:** Definition, classification, explanation.		
Eighth	5		**Cornea**: Definition, classification, function.		

Ninth	5		**Anterior chamber of the eye:** Definition, explanation, function.		
Tenth	5		**The Uvea tract:** Definition, classification, function.		
elevent h	5		**The Ciliary body:** Definition, classification, function.		
twelfth	5		**Lens**: Definition, classification, function.		
Thirtee n	5		**The Retina**: Definition, explanation, function		
fourteen	5		**Blood and Nerve supply:** Definition, classification, function.		
fifteen	5		**Revision**		

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.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. General Ophthalmology \ Kanski's Clinical Ophthalmology A Systematic Approach, Tenth Edition
Main references (sources)	2. Brunner & Suddarth's Core Textbook: Hinkle, J. L., Cheever, K. H. Overbaugh, K. J. (2024). Brunner & Suddarth's Textbook Medical-Surgical Nursing (15th ed.).
Recommended books and references (scientific journals, reports...)	3. Basic ophthalmology essentials for medical students.
Electronic References, Websites	

Course Description Form

Computer

1. Course Name:

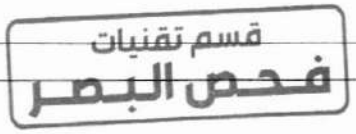
Computer

2. Course Code:

ATU22

3. Semester / Year:

Second / 2025-2026



4. Description Preparation Date:

015/02/2026

5. Available Attendance Forms:

In presence

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

3 hours per week / 2 units

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

Name: Ahmed Younis Abdul Kadhim Email: ahmed.kazem.chm@atu.edu.iq

8. Course Objectives

Course Objectives	The course aims to enable students to utilize the computer for fundamental tasks, understand its hardware components, and create documents and presentations. It also seeks to equip students with internet research skills and provide an introduction to Artificial Intelligence.

9. Teaching and Learning Strategies

Strategy	1. Board - Normal or Smart. 2. Computers. 3. Presentation software such as PowerPoint.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	3	Theoretical and practical knowledge	• Security and Networking: What is a network? Types of networks. Basic network components.	• In presence	Quarterly and weekly tests.
Second	3		• Security and Networking (Cont.): Network Security Basics. Understanding network threats.		
Third	3		• E-Commerce: Concepts of Electronic banking services this include online banking: ATM and		

			debit card services, Phone banking, SMS banking, electronic alert, Mobile banking.		
Fourth	3		• Computer Troubleshooting: Identifying and solving common hardware and software problems that computer users encounter.		
Fifth	3		• Computer Troubleshooting (Cont.): Basic troubleshooting techniques and tools for diagnosing and resolving issues.		
Sixth	3		• Introduction to AI: Definition of AI, History of AI, AI Techniques and Approaches.		
Seventh	3		• Introduction to AI (Cont.): Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.		
Eighth	3		The Role of AI in Modern Smartphones: AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).		
Ninth	3		• The Role of AI in Modern Smartphones (Cont.): Adaptive Learning, Real-Time Translation Services.		
Tenth	3		Applications and Tools of AI: Overview of AI Applications in Various Industries, Education and Healthcare.		
eleventh	3		• Applications and Tools of AI (Cont.): Transportation, Marketing and Advertising.		
twelfth	3		• Applications and Tools of AI (Cont.): Finance, Robotics and Automation Technologies.		
Thirteen	3		• AI and Society: How AI affects social, AI and international		

			relations, AI and the future of humanity.		
fourteen	3		• Ethical Challenges in AI: AI ethics, privacy and surveillance, the impact of AI on the job market.		
fifteen	3		• The Future of AI: Future trends in AI, recent research and emerging technologies.		

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.	
12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020).
Main references (sources)	Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technolog Action Complete", 16th Edition (2020).
Recommended books and references (scientific journals, reports...)	Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).
Electronic References, Websites	Microsoft Office 2019 Step by Step 1st Edition by Curtis Frye & Joan Lambert. الخضر علي الخضر بحاث، "أساسيات الحاسوب" 2016. الدكتور عادل عبدالنور، "مدخل إلى عالم الذكاء الاصطناعي"2005.

Course Description biology

1. Course Name
biology
2. Course Code
ATU13_VST_114CM
3. Semester / Year
First Semester / First Year
4. The history of preparation of this description
2024/09/16
5. Available Attendance Forms
In presence
6. Number of Credit Hours (Total) / Number of Units (Total)
4/6
7. Course administrator's name (if more than one name)
Name: Dr. Ameer abood kreem Email :
8. Course Objectives
Knowledge of microorganisms that cause injuries, whether bacterial, viral or parasite infections that affect the body systems and that help the physical therapist in treating such cases.

9. Teaching and Learning Strategies

Strategies
✓ Cooperative Education Strategy. ✓ Brainstorming Education Strategy. ✓ Education Strategy Collaborative Concept Planning. ✓ Real-time feedback education strategy ✓ Education Strategy Notes Series. ✓ Interactive and Discussion Education Strategy. ✓ Education Strategy by Presentation of Information. ✓ The strategy of education by training and presentation of scient developments

10. Course Structure

Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	The week
Daily, oral and written exams Reports, discussions.	Theoretical + Practical	microbiology- Introductic &microscope, precaution waste disposal		6	1
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	Classification of Micro-organisms & morphology Bacteria		6	2
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	Sterilization & disinfectic [basic concepts] hospita acquired infection, univer safety		6	3
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**immunology** :Antigen antibody - reaction & application for diagnosis;		6	4

		Immune response - normal/abnormal			
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**immunology** : Innate immunity & acquired immunity [vaccination], Hyper - sensitivity & auto-immunity		6	5
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	Laboratory Diagnosis of Infection		6	6
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**Bacteriology :** . Infection caused by gram +ve cocci; Gas gangrene - clostridium -Diphtheria , Infection caused by gram –ve cocci, Septicemia-cholera - Shock Typhoid diarrhea		6	7
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**Bacteriology :** Mycobacterial infection tuberculosis: Leprosy-Atypical Mycobacterium d. syphilis – morphology & pathogenesis [VDRL]		6	8
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**Viruses** Polio, measles, congenital viral infections, Rubella, CMV Herpes		6	9
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**Mycology**		6	10
Daily, oral and written exams, reports, discussions.	Theoretical + Practical	Parasites affecting C. N. S.		6	11

Daily, oral and written exams, reports, discussions.	Theoretical + Practical	**Malaria** - Filaria - Toxoplasma – Cystiscercosis		6	12
Daily exams Oral, writt reports, discussions.	Theoretical + Practical	**Applied biology** as relevant to diseases involving Bones, Joints - Nerves - Muscles-Skin - brain-cardiopulmonary system & burns.		6	13
Daily, oral and written exams Reports, Discussions.	Theoretical + Practical	**Viruses:** Introduction & general properties, .HIV		6	14
Daily, oral and written exams Reports, Discussions.	Theoretical + Practical	REVISION		6	15

11. Course Evaluation

Striving: Theoretical: 25 Practical: 15/ Final: Theoretical: 35 Practical: 25

12. Learning and Teaching Resources

	Required textbooks (methodology)
1. 2THuman biology: concepts and current issues 1T2b 0T1Johnson, Michael D.0T third edition 2. Biology a functional approach, 1987 ,2P ndP edition MBV Roberts,TJ King . 3. Advanced biology ,2000.Micheal Roberts , Micheal ri Grace Monger	Main references (sources)
	Recommended supporting books and references (Scientific journals, reports...)
	Electronic References, Websites

Course Description For Arabic

1. Course Name
Arabic Language
2. Course Code
ATU11
Semester / Year
Second Semester / First Year
3. The history of preparation of this description
16/9/2024
4. Available Attendance Forms
In presence
5. Number of Credit Hours (Total) / Number of Units (Total)
2/2
6. Course administrator's name (if more than one name)
Name: Dr. Mohannad Badie Email : muhannad.najickm@atu.edu.iq
7. Course Objectives
General: Developing the spirit of pride in the Arabic language Special: Developing students' language skills Upgrading students' professional and research level Developing the grammatical and literary abilities of the university student
8. Teaching and Learning Strategies

✓ Cooperative education strategy. ✓ Brainstorming education strategy. ✓ Education strategy collaborative concept planning. ✓ Real-time feedback education strategy ✓ Education Strategy Notes Series. ✓ The strategy of education by exchanging views and discussing. ✓ Education strategy by presenting information. ✓ Education strategy by training and presentation of scientific developments.	**Strategy**

9. Course Structure

Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	The week
Daily, oral and written exams, reports, discussions.	Theoretical	Introduction to Linguistic Errors – T The tethered - the long and the open t		2	1
Daily, oral and written exams, reports, discussions.	Theoretical	Rules for writing an elongated thousand The cabin – solar letters The Lunar		2	2
Daily, oral and written exams, reports, discussions.	Theoretical	Al-Daad and Al-Zaa		2	3
Daily, oral and written exams, reports, discussions.	Theoretical	Hamza writing		2	4
Daily, oral and written exams, reports, discussions.	Theoretical	Punctuation		2	5
Daily, oral and written exams, reports, discussions.	Theoretical	Noun and verb and differentiate between them		2	6

Daily, oral and written exams, reports, discussions.	Theoretical	Reactor		2	7
Daily, oral and written exams, reports, discussions.	Theoretical	Number		2	8
Daily, oral and written exams, reports, discussions.	Theoretical	Applications of common linguistic errors		2	9
Daily, oral and written exams, reports, discussions.	Theoretical	Noon and Tanween meanings of prepositions		2	10
Daily, oral and written exams, reports, discussions.	Theoretical	Formal aspects of administrative discourse		2	11
Daily, oral and written exams, reports, discussions.	Theoretical	The language of administrative discourse		2	12
Daily, oral and written exams, reports, discussions.	Theoretical	Samples of administrative correspondence		2	13
Daily, oral and written exams, reports, discussions.	Theoretical	Introduction to Linguistic Errors – T The tethered - the long and the open t		2	14
Daily, oral and written exams, reports, discussions.	Theoretical	Rules for writing an elongated thousand The cabin – solar letters The Lunar		2	15
10. Course Evaluation					
Endeavor: 30/ Final: 70					
11. Learning and Teaching Resources					

	Required textbooks (methodology)
1 The book of the workbook in the explanation of the book of discharge 2 Manual grammar book	Main references (sources)
	Recommended supporting books a references (Scientific journals, reports...)
	Electronic References, Websites

Course Description Form

1. Course Name: **Medical and Optical Physics**
Course Code ATU13_VST_113CM
1. Semester/First Semester
Annual/2025-2026
2. Date of Preparation of this Description
February 11, 2026
3. Available Attendance Forms
In-Person
4. Total Study Hours / Total Units
Theory (3) Hours Practical (5) Units (8)
5. Course Instructor's Name (if more than one is mentioned)
Name: Dr. Fatima Abbas Shaker e-mail: fatima.abbas@atu.edu.iq Name: Zahraa Mohammed Mashkoor e-mail: zahraa.mashkoor@atu.edu.iq

6. Course Objectives

Specific Objectives: • Recognize light, electromagnetic spectrum, and rainbow formation. • Understand optical phenomena such as reflection, refraction, polarization, and diffraction. • Study mirrors, their types, problem solving, and telescope applications.	General Objective By the end of the semester, the student will be able to understand optical phenomena in physics.

• Study prisms, lenses, their types and defects, and related problem solving. • Study the eye, its parts, and diagnostic instruments. • Understand vision, refractive errors, and correction methods. • Study visual acuity and color blindness. • Study lasers, their types, and applications.	

6. Teaching and Learning Strategies

1. Direct guidance and follow-up 2. Establishing good role models among students 3. Theoretical tests 4. Assignments	**Strategies**

7. Course Structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches	week
Practical tests, reports and studies	theoretical	Light and vision :introduction ;light waves	Study and knowledge	2	1
Practical tests and exams Theory, reports and studies	theoretical	light velocity ;light rays and beams electromagnetic spectrum	Study and knowledge	2	2
Practical tests and exams Theory, reports and studies	theoretical	Reflection: definition ; Reflection at plan surfaces: regular Reflection :irregular reflection image formation by plane mirror; direction of image seen by eye.	Study and knowledge	2	3

Practical tests and exams Theory, reports and studies	theoretical	Lenses: definition; focal length ;lens power ; types	Study and knowledge	2	4
Practical tests and exams Theory, reports and studies	theoretical	Refraction: : definition; Refraction index ;total internal Reflection	Study and knowledge	2	5
Practical tests and exams Theory, reports and studies	theoretical	Diffraction: definition; concept; grating; mechanism ;constructive. And destructive.	Study and knowledge	2	6
Practical tests and exams Theory, reports and studies	theoretical	Coherent sources ;single slit ;double slit; effect on the eye. Polarization: definition; polarizer's law.	Study and knowledge	2	7
Practical tests and exams Theory, reports and studies	theoretical	Telescope: definition; purposes; types design; constructions.	Study and knowledge	2	8
Practical tests and exams Theory, reports and studies	theoretical	Reflection at curved mirror , spherical mirror , type of spherical mirror , rays diagram for a concave and convex	Study and knowledge	2	9
Practical tests and exams Theory, reports and studies	theoretical	Magnification , mirror equation , examples Eye: definition; parts; focusing element; photoreceptors	Study and knowledge	2	10

		cells; accommodation. Refraction errors: emmetropia ; ametropia; myopia; hypermtropia.			

8. Course Assessment

Grades are distributed as follows:

Theoretical: 60%

Practical: 40%

Based on daily preparation, quizzes, oral exams, monthly exams, written exams, and reports.

9. Teaching and Learning Resources

- Required textbooks (if available)
- Approved references, research articles, and Internet resources
- Supporting books and scientific journals
- Electronic references and websites