

**Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Department of Quality Assurance and Academic
Accreditation Division**



Academic Program Description Manual

2024

academic Program Description Template

University Name: **Uruk Private University**

College / Faculty: College of Medical and Health Technologies-

Scientific Department: Department of Optical Techniques

Name of the Academic or Professional Program: Bachelor's Degree

Name of the Final Certificate: Bachelor in Optical Techniques

Study System: Semester-based + Annual

Date of Course Description Preparation: 4/3/2024

Date of Form Completion: 4/3/2024

Signature:

Deputy Dean Academic for Affairs:

Dr. Faiza Hazem Hassan

Date: 16/6/2025

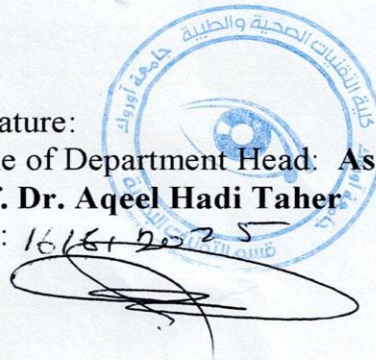


Signature:

Name of Department Head: **Asst.**

Prof. Dr. Aqeel Hadi Taher

Date: 16/6/2025



File Reviewed By:

Quality Assurance and University Performance Division

Director of the Quality Assurance and University Performance Division:

Dr. Hussein Arrak Majeed Azlubaidi

Date: 20-5-2025

Signature:



Approval of the Dean



Introduction:

The educational program is a coordinated and structured package of academic courses comprising procedures and experiences organized into curricular components. Its primary purpose is to develop and refine graduates' skills, making them qualified to meet the demands of the labor market. The program is reviewed and evaluated annually through internal or external auditing procedures and mechanisms, such as the External Examiner Program.

The academic program description provides a concise summary of the program's key features and its courses, outlining the competencies and skills the students are expected to acquire, which are aligned with the objectives of the academic program. This description is of particular importance as it forms the foundation for obtaining program accreditation. It is collaboratively written by the teaching staff under the supervision of the scientific committees within the academic departments.

This second edition of the guide includes an updated description of the academic program, reflecting revisions to the contents and components of the previous version in light of recent developments in Iraq's educational system. It includes descriptions in both traditional formats (annual and semester-based systems), as well as the unified academic program description adopted in accordance with the directive issued by the Directorate of Studies (Ref. T.M.3/2906 dated 03/05/2023), particularly for programs operating under the Bologna Process framework.

In this context, we emphasize the critical importance of preparing clear and accurate descriptions of academic programs and courses to ensure the effective implementation of the educational process.

Concepts and Terminology:

Academic Program Description:

The academic program description provides a concise summary of the program's

vision, mission, and objectives, including a precise articulation of the intended learning outcomes, aligned with specific teaching and learning strategies.

Course Description:

The course description offers a brief overview of the course's key features and the learning outcomes students are expected to achieve. It serves as evidence of whether students have made optimal use of available learning opportunities. Course descriptions are derived from the overarching program description.

Program Vision:

An aspirational and forward-looking depiction of the future of the academic program, presenting it as progressive, inspiring, motivating, realistic, and applicable.

Program Mission:

A brief statement outlining the objectives and activities required to achieve the program's goals, while also defining its developmental pathways and strategic direction.

Program Objectives:

Statements that describe what the academic program aims to accomplish within a specific timeframe. These objectives should be measurable and observable.

Curriculum Structure:

The complete set of courses/modules included in the academic program, according to the adopted system of study (semester-based, annual, or Bologna Process). This includes all mandatory requirements (as defined by the Ministry, University, College, and Department) along with the corresponding credit units.

Learning Outcomes:

A coherent set of knowledge, skills, and values acquired by the student upon successful completion of the academic program. Learning outcomes must be defined for each course in a way that supports the overall objectives of the program.

Teaching and Learning Strategies:

These are the strategies employed by faculty members to enhance student learning.

They are planned methods used to achieve learning objectives and describe both in-class and extracurricular activities designed to accomplish the program's intended learning outcomes.

1. Program Vision

The future vision of the Department of Optical Technologies is to be a leading and inspiring academic program characterized by high ambition and continuous development. The program aspires to foster creativity and innovation while remaining practical and applicable across various fields of optical technologies. It is designed to keep pace with rapid technological advancements and to contribute effectively and sustainably to shaping the future of the optical sector.

2. Program Mission

One of the main responsibilities of the department is to prepare highly trained professionals in the field of vision science, including the diagnosis of eye diseases and the fabrication of eyeglasses and contact lenses. Graduates are distinguished by a high level of knowledge and creativity in operating medical devices used in the examination and diagnosis of visual impairments. The program emphasizes alignment with internationally recognized medical standards for quality assurance and academic accreditation, as well as the ability to analyze results using biostatistical methods and medical software comparable to those employed in Iraqi universities.

3. Program Objectives

1. The Department of Optical Technologies aims to prepare specialized civilian personnel qualified to work in hospitals, vision testing centers, workshops, and private clinics.
2. Graduates of the Department will be capable of performing vision examinations.
3. Graduates will be able to assess visual acuity and diagnose and manage strabismus.
4. Graduates will be proficient in fitting lenses for prescription eyeglasses and utilizing computer systems relevant to the field.
5. Graduates will be qualified to prescribe corrective eyeglasses, contact lenses, and visual aids, and to participate in vision assessment, correction procedures, and eyeglass repair.
6. Graduates will be capable of maintaining and caring for medical and optical equipment.

4. Program Accreditation

A comprehensive study has been submitted to obtain accreditation, including a self-assessment report, an improvement plan, and a compliance report.

Program Accreditation

A comprehensive study has been submitted to obtain accreditation, including a self-assessment report, an improvement plan, and a compliance report.

5. Other External Influences

Laboratories, library, hospitals, and internet access.

6. Program Structure

| Component | Number of Courses | Credit Units | Percentage | Remarks* |
|----------------------------|-------------------|--------------|------------|----------|
| Institutional Requirements | 54 | 194 | %100 | |
| College Requirements | 6 | | | |
| Department Requirements | 54 | 194 | %100 | |
| Summer Training | 2 | fulfilled | %100 | |
| Others | | | | |

*Remarks may include whether the course is core (compulsory) or elective

7. Program Description

| Year/Level | Course Code | Course Title | Credit Hours | |
|------------|-------------|-------------------------------|--------------|-----------|
| | | | Theoretical | Practical |
| First Year | AHN18101 | Head and Neck Anatomy | 2 | 5 |
| First Year | CHM18101 | Principles of Chemistry | 2 | 4 |
| First Year | MOP18101 | Medical and Optical Physics I | 3 | 5 |
| First Year | BIO18101 | Biology I | 2 | 4 |

| | | | | |
|-------------|----------|-------------------------------------|---|---|
| First Year | COP18101 | Principles of Computer Science I | 1 | 2 |
| First Year | HRD18101 | Human Rights and Democracy | 2 | 0 |
| First Year | ENL18101 | English Language | 2 | 0 |
| First Year | ANE18102 | Ocular Anatomy | 2 | 5 |
| First Year | BIO18102 | Biochemistry | 2 | 4 |
| First Year | MOP18102 | Medical and Optical Physics II | 3 | 5 |
| First Year | BOL18102 | Biology II | 2 | 4 |
| First Year | COM18102 | Principles of Computer Science II | 1 | 2 |
| First Year | ARL18102 | Arabic Language | 2 | 0 |
| Second Year | PHE18201 | Physiology of the Eye and Vision I | 2 | 4 |
| Second Yea | OPE18201 | Optical Devices I | 2 | 5 |
| Second Yea | EYH18201 | Ocular Health I | 2 | 4 |
| Second Yea | REE18201 | Refractive Errors I | 2 | 5 |
| Second Yea | STA18201 | Statistical Applications I | 1 | 3 |
| Second Yea | MET18201 | Medical Terminology | 2 | 0 |
| Second Yea | COP18201 | Computer Applications I | 1 | 2 |
| Second Yea | CRB18201 | Crimes of the Ba'ath Regime in Iraq | 2 | 0 |
| Second Yea | PHE18202 | Physiology of the Eye and Vision II | 2 | 4 |
| Second Yea | OPE18202 | Optical Devices II | 2 | 5 |
| Second Yea | EYH18202 | Ocular Health II | 2 | 4 |
| Second Yea | REE18202 | Refractive Errors II | 2 | 5 |
| Second Yea | STA18202 | Statistical Applications II | 1 | 3 |
| Second Yea | PHA18202 | Pharmacology | 2 | 0 |
| Second Yea | LIO18202 | Laser Applications in | 1 | 3 |

| | | | | |
|-------------|----------|--|---|---|
| | | Ophthalmology | | |
| Second Yea | ARL18202 | Arabic Language | 2 | 0 |
| Second Yea | COP18202 | Computer Applications II | 1 | 2 |
| Third Year | DMS18301 | Ocular Manifestations of Systemic Disorders I | 1 | 3 |
| Third Year | PEY18301 | Prescription Eyeglasses I | 2 | 4 |
| Third Year | SQU18301 | Strabismus I | 2 | 4 |
| Third Year | REF18301 | Refractive Errors III | 2 | 4 |
| Third Year | OPT18301 | Optical Devices III | 2 | 4 |
| Third Year | TOD18301 | Laser Treatment of Eye Diseases | 1 | 2 |
| Third Year | COP18301 | Computer Applications I | 1 | 2 |
| Third Year | OCM18302 | Ocular Manifestations of Systemic Disorders II | 1 | 3 |
| Third Year | PEY18302 | Prescription Eyeglasses II | 2 | 4 |
| Third Year | SQU18302 | Strabismus II | 1 | 4 |
| Third Year | REF18302 | Refractive Errors IV | 2 | 4 |
| Third Year | OPT18302 | Optical Devices IV | 2 | 4 |
| Third Year | COP18302 | Computer Applications II | 1 | 2 |
| Third Year | RES18302 | Research Methods | 2 | 0 |
| Fourth Year | DIE18400 | Ophthalmic Diseases II | 2 | 4 |
| Fourth Year | SQU18400 | Strabismus II | 2 | 4 |
| Fourth Year | POP18400 | Pediatric Ophthalmology | 1 | 2 |
| Fourth Year | GCL18400 | Eyeglasses and Contact Lenses II | 2 | 4 |
| Fourth Year | OCP18400 | Ocular Prostheses | 2 | 4 |
| Fourth Year | XRE18400 | Ocular Radiology and Ultrasound | 2 | 4 |
| Fourth Year | PRO18400 | Graduation Project | - | - |
| Fourth Year | WOT18400 | Workshop | - | 4 |

| | | | | |
|-------------|----------|---------------------|---|---|
| Fourth Year | ENG18400 | English Language | 1 | - |
| Fourth Year | PRE18400 | Professional Ethics | 1 | - |

| 7. Expected Learning Outcomes of the Program | |
|--|---|
| Value | |
| Learning Outcomes | <p>Cognitive Objectives</p> <ol style="list-style-type: none"> 1. To understand and study the anatomical structures of the head, neck, and eye. 2. To become familiar with the fundamentals of general chemistry and biochemistry. 3.To study the basics of medical and optical physics, including their applications and types of lenses. 4.To understand the fundamentals of human biology at the cellular and genetic levels, including the types of human tissues, as well as the basics of microbiology such as bacteria, fungi, viruses, and parasites that affect the eye. 5.To become familiar with medical terminology relevant to the field of specialization. 6.To understand the basics of computer systems, including both software and hardware components. 7.To respect human rights and comprehend the concept of democracy within society. |
| Skills | |
| | Skills-Based Objectives. |

| | |
|-------------------|--|
| Learning Outcomes | <ol style="list-style-type: none"> 1. Ability to identify the anatomical structures of the head, neck, and eye using anatomical models in the laboratory. 2. Proficiency in conducting chemical reactions and analyzing their outcomes in the laboratory setting. 3. Competence in performing physical experiments and applying medical physics concepts in the lab. 4. Skill in using a light microscope, maintaining it, examining and preparing glass slides, and diagnosing microorganisms such as bacteria and fungi. 5. Ability to use a computer practically and demonstrate proficiency in key software applications. |
| Values | |
| | <ol style="list-style-type: none"> 1. The student should actively engage during lectures. 2. The student should listen attentively to explanations. 3. The student should participate in and contribute to extracurricular activities. 4. The student should learn to act professionally. 5. The student should develop interpersonal communication skills. |
| | |

8. Teaching and Learning Strategies

Blended learning, which consists of in-person instruction including the use of smart classrooms and specialized educational laboratories tailored to each subject, in addition to electronic communication with students for assigning tasks and delivering instructions.

9. Assessment Methods

- 1- Preparation of a seminar research project (graduation thesis).
- 2- Use of a grading system as the basis for evaluation.

- 3- Implementation of written examinations.
- 4- Use of discussions and dialogues between students and the instructor as an assessment tool.
- 5- Assigning test-based tasks through virtual classrooms.
- 6- Use of electronic assessments via Google Forms.

| 10. Teaching Staff | | | | | | |
|-----------------------------------|------------------------|-------------------------------|---|--|---------------------------|-------------------|
| Faculty Members | | | | | | |
| Academic Rank | Specialization | | Requirements / Specific Skills (if any) | | Number of Faculty Members | |
| | General | Private | | | Permanent Staff | Visiting Lecturer |
| Asst. Prof. Aqeel Hadi Tahir | | Ophthalmology | Head of the Optical Technologies Department | | yes | |
| Asst. Lecturer Doaa Kamel Abbas | Biotechnology Sciences | | Department Rapporteur | | yes | |
| Asst. Prof. Ahmed Rasool Ghafouri | Medicine | Ophthalmology | Lecturer | | yes | yes |
| Asst. Prof. Mohammed Abd Muheimid | General Medicine | Pediatrics and Neonatology | Lecturer | | yes | |
| Asst. Prof. Sama Mahmood Shakir | Medicine | Ophthalmology and Eye Surgery | Lecturer | | | yes |
| Asst. Prof. Haider Sabah Kadhim | Biology | | Lecturer | | yes | |

| | | | | | | |
|--|----------------------------------|--------------------------------|----------|--|-----|-----|
| Asst. Lecturer Ibrahim Abdul Kareem | Applied Sciences / Physics | | Lecturer | | yes | |
| Asst. Lecturer Wafaa Abdul Aziz Fleihe | Chemistry | | Lecturer | | yes | |
| Asst. Lecturer Mo'men Ibrahim Jameel | Computer Science | | Lecturer | | yes | |
| Asst. Lecturer Muhaimen Sameer Aref | Optical Technologies | | Lecturer | | yes | |
| Asst. Lecturer Sara Hashem Zgair | Veterinary Medicine | Pharmacology and Toxicology | Lecturer | | yes | |
| Asst. Lecturer Alaa Khummas Hussein | Optical Technologies | Vision Examination | Lecturer | | | yes |
| Asst. Lecturer Ayham Ali Mohammed | Optical Technologies | | Lecturer | | | yes |
| Technician Yasser Amer Nasser | Optical Technologies | | Lecturer | | | yes |
| Technician Ali Adnan Jassim | Optical Technologies | | Lecturer | | | yes |
| Technician Salem Faraj Saloomi | Optical Technologies | | Lecturer | | Yes | |
| Technician Rafal Hassan Khalil | Optical Technologies | | Lecturer | | | yes |

Professional Development

Orientation for New Faculty Members

Guidance is provided on maintaining discipline at work, avoiding delays in responsibilities, and managing the classroom smoothly and calmly.

Professional Development for Faculty Members

Engaging faculty members in continuing education programs offered by universities and institutes under the Ministry of Higher Education and Scientific Research, such as courses on modern teaching methods, occupational safety, and others.

Organizing in-college training courses for faculty, conducted by specialized professors and external lecturers in various fields of expertise.

Hosting scientific conferences, seminars, and workshops in medical and health-related fields, with a focus on involving faculty members to keep pace with advancements in scientific research.

Delivering and presenting scientific seminars attended by the teaching staff.

Conducting workshops aimed at developing administrative skills among staff, particularly in areas related to quality assurance, student registration, and university statistics.

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11. Admission Standard

Centralized, according to the requirements of the Ministry of Higher Education and Scientific Research / Private Education

12. Main Sources of Information about the Program

- 1- The website of the College of Health and Medical Technologies
- 2- The website of Uruk University
- 3- The teaching staff at the college
- 4- Lecturers' course materials

13. Program Development Plan

Developing and establishing specialized scientific laboratories to enable students to

explore the latest modern technologies.

| Learning Outcomes of the Program map | | | | | | | | | | | | | | | |
|--------------------------------------|-------------|-----------------------------------|------------------|---|----|----|----|--------|----|----|----|--------|----|----|----|
| | | | | Required Learning Outcomes of the Program | | | | | | | | | | | |
| Year / Level | Course Code | Course Title | Core or Elective | Knowledge | | | | Skills | | | | Values | | | |
| | | | | 1A | 2A | 3A | 4A | 1B | 2B | 3B | 4B | 1J | 2J | 3J | 4J |
| First Stage | | | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | AHN18101 | Head and Neck Anatomy I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | ANE 18102 | Ocular Anatomy II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | CHM18101 | Principles of Chemistry | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | BIO18101 | Biology I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | BOL18102 | Biology II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | COP18101 | Principles of Computer Science I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | COM18102 | Principles of Computer Science II | Core | / | / | / | / | / | / | / | / | / | / | / | / |

| | | | | | | | | | | | | | | | |
|---------------------|-----------|--------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | BIO 18102 | Biochemistry | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | HRD18101 | Human Rights and Democracy | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | MOP18101 | Medical and Optical Physics I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | MOP18102 | Medical and Optical Physics II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | ENL18101 | English Language | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | ARL18102 | Arabic Language | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| Second Stage | REE 18201 | Refractive Errors I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | REE 18202 | Refractive Errors II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | OPE18201 | Optical Devices I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | OPE18202 | Optical Devices II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | STA18201 | Statistical Applications I | Core | / | / | / | / | / | / | / | / | / | / | / | / |

| | | | | | | | | | | | | | | | |
|--|----------|-------------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | STA18202 | Statistical Applications II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | PHE18201 | Physiology of the Eye and Vision I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | PHE18202 | Physiology of the Eye and Vision II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | ARL18202 | Arabic Language | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | PHA18202 | Pharmacology | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | LIO18202 | Laser in Ophthalmology | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | EYH18201 | Ocular Health I | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | EYH18202 | Ocular Health II | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | ENG18202 | English Language | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | CRB18201 | Crimes of the Ba'ath Regime | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | MET18201 | Medical | Core | / | / | / | / | / | / | / | / | / | / | / | / |

| | | | | | | | | | | | | | | | |
|--------------------|----------|--|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Terminology | | | | | | | | | | | | | |
| | COP18201 | Computer Applications I | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | COP18202 | Computer Applications II | Core | / | / | / | / | / | / | / | / | / | / | / | |
| Third Stage | DMS18301 | Ocular Disorders in Systemic Diseases I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | OCM18302 | Ocular Disorders in Systemic Diseases II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | SQU18301 | Strabismus I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | SQU18302 | Strabismus II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | REF18301 | Refractive Errors III | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | REF18302 | Refractive Errors IV | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | OPT18301 | Optical Devices III | Core | / | / | / | / | / | / | / | / | / | / | / | / |

| | | | | | | | | | | | | | | | |
|---------------------|----------|---------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | OPT18302 | Optical Devices IV | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | TOD18301 | Laser Treatment of Eye Diseases | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | COP18301 | Computer Applications I | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | COP18302 | Computer Applications II | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | PEY18301 | Prescription Eyeglasses I | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | PEY18302 | Prescription Eyeglasses II | Core | / | / | / | / | / | / | / | / | / | / | / | |
| | RES18302 | Research Methods | Core | | | | | | | | | | | | |
| Fourth Stage | WOT18400 | Workshop | Core | / | / | / | / | / | / | | / | / | / | / | / |
| | DIE18400 | Ophthalmic Diseases | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | OCP18400 | Ocular Prostheses | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | SQU18400 | Strabismus | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | ENG18400 | English Language | Core | / | / | / | / | | / | / | / | / | / | / | / |

| | | | | | | | | | | | | | | | |
|--|----------|----------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|---|
| | POP18400 | Pediatric Ophthalmology | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | GCL18400 | Eyeglasses and Contact Lenses | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | XRE18400 | Ocular Imaging and Ultrasound | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | PRE18400 | Professional Ethics | Core | / | / | / | / | / | / | / | / | / | / | / | / |
| | PRO18400 | Graduation Project | Core | | | | | | | | | | | | |

Please place a checkmark in the boxes corresponding to the individual program learning outcomes being assessed.

Course Description Template

| | |
|--|---|
| 1.Course Title | |
| Human Biology | |
| 2.Course Code | |
| BIO18101 | |
| 3. Semester/ Academic Year: | |
| Semester-based 2024–2025 | |
| 4. Date of Preparation of this Description | |
| 19-3-2025 | |
| 5. Available Forms of Attendance . | |
| In person | |
| 6. Total Contact Hours / Total Credit Units | |
| 6 hours 4 units | |
| 7. Name of the Course | |
| Name: Dr. Haider Sabah Kadhem Email: haiderskm@yahoo.com | |
| 8. Course Objectives | |
| Course Objectives | <input type="checkbox"/> General Objective: To identify living cells. <input type="checkbox"/> Specific Objective: To identify the types of cells and tissues, as well as the histological structure of the eye. |
| 9. Teaching and Learning Strategies | |
| Strategy | <input type="checkbox"/> Presentation on the screen (PowerPoint) <input type="checkbox"/> Daily exams (quizzes) <input type="checkbox"/> Reliance on classroom activity |

| | |
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| | |
|--|--|

10. Course Structure

| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
|---|-----------|----------------------------|---|--|---|
| Week First Second Third Fourth Fifth Sixth Seventh Eighth Ninth Tenth Eleventh Twelfth Thirteenth Fourteenth Fifteenth | Two hours | | <div> <div> <div>Structure of DNA</div> <div> <div> <div>description, protein synthesis and type of mutation</div> <div>gene Call (Mutasi and crosses)</div> <div>cell</div> <div>metagenesis</div> <div>metagenesis and vegetative</div> <div>reproduction of bacteria (Shape, arrangement, size, generation)</div> <div>sexual rearing techniques (Crossing)</div> <div>cell and molecular experiments</div> <div>reproduction of Virus</div> <div>reproduction of Fungi</div> <div>reproduction of Microalgae</div> <div>reproduction and biotechnology</div> <div>level of structural growth</div> <div>reproduction components of human teeth and their functions</div> <div>reproduction, structural eye reduction, Fungal eye reduction, male eye reduction, Viral eye reduction</div> </div> </div> </div> </div> | <input type="checkbox"/> Presentation on screen (PowerPoint) <input type="checkbox"/> Daily exams (quizzes) <input type="checkbox"/> Relying on classroom activity | <input type="checkbox"/> Daily exams <input type="checkbox"/> Monthly exam |

11 . Course Assessment

Grade Distribution out of 100 Based on Student Tasks, such as daily preparation, quizzes, oral exams, monthly written exams, reports, etc

12. Learning and Teaching Resources

| | |
|--|---|
| Required Textbooks (Prescribed curriculum, if applicable) | |
| Primary References (Main sources) | f. Gonsalves, Biology 25: Human Biology, Los Angeles City College, Loosely Based on Mader's Human Biology, 7th edition. |
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | |
| Electronic References and Internet Resources | |

| | |
|--|--|
| Course Title | |
| Computer Applications | |
| Course Code | |
| COP18202 | |
| Semester/year | |
| Second Semester / Second Stage / 2024–2025 | |
| Date of Preparation of this Description | |
| 18/4/2025 | |
| Available Forms of Attendance .28 | |
| In-person | |
| Total Contact Hours / Total Credit Units | |
| 30 Practical / 15 Theoretical / 2 Units | |
| Name of the Course Coordinator | |
| Name: Asst. Lecturer Mumin Ibrahim Jameel Email: mumin.i.jameel@uruk.edu.iqmumin.i.jameel@uruk.edu.iq | |
| Course Objectives | |
| Course Objectives | To understand the basics and components of networks and their types. To become familiar with the concept of the Internet and its applications (e.g., email, browsers). To equip students with skills in creating, editing, and printing presentations. To use spreadsheets for performing calculations. An introduction to artificial intelligence, its applications, and uses. |
| Teaching and Learning Strategies | |
| Strategy | <input type="checkbox"/> Teaching the theoretical content by presenting it to students and encouraging their participation. <input type="checkbox"/> Teaching the practical part of the subject using computers. <input type="checkbox"/> Having students apply the material practically using computers. <input type="checkbox"/> Conducting implicit (formative) assessments during the lecture. <input type="checkbox"/> Activating an assessment in the lecture following the explanation to reinforce the material and evaluate its effectiveness for students. |
| | |

Course Structure

| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
|---------|-------|---|---|---------------------------------------|---------------------|
| First | 3 | What is a network? | Security and Networks | Theoretical and practical explanation | Discussion and exam |
| Second | 3 | Types of networks, basic components of a network | Security and Networks | Theoretical and practical explanation | Discussion and exam |
| Third | 3 | | E-Commerce | Theoretical explanation | Discussion and exam |
| Fourth | 3 | Basics of network security, understanding network threats | Computer Troubleshooting and Repair | Theoretical and practical explanation | Discussion and exam |
| Fifth | 3 | | Computer Troubleshooting and Repair | Theoretical and practical explanation | Discussion and exam |
| Sixth | 3 | E-commerce concepts | | Theoretical explanation | |
| Seventh | 3 | Identifying and resolving common hardware and software issues faced by computer users | Introduction to Artificial Intelligence | Theoretical explanation | Discussion and exam |
| Eighth | 3 | Basic tools and techniques for diagnosing and solving problems | Introduction to Artificial Intelligence | Theoretical and practical explanation | Discussion and exam |
| Ninth | 3 | | The Role of Artificial Intelligence in Modern Smartphones | Theoretical and practical explanation | Discussion and exam |
| Tenth | 3 | definition of artificial intelligence, | The Role of Artificial Intelligence in Modern Smartphones | Theoretical explanation | Discussion and exam |

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|------------|---|---|--|-------------------------|---------------------|
| Eleventh | 3 | history of AI, AI techniques and approaches | Artificial Intelligence Applications and Tools | Theoretical explanation | Discussion and exam |
| Twelfth | 3 | Key characteristics of AI, benefits of AI, ethical challenges and considerations | Artificial Intelligence Applications and Tools | Theoretical explanation | Discussion and exam |
| Thirteenth | 3 | Mobile technologies supported by AI, virtual assistants (Siri, Google Assistant, Alexa) | Artificial Intelligence and Society | Theoretical explanation | Discussion and exam |
| Fourteenth | 3 | Google Assistant (Alexa) | Ethical Challenges in Artificial Intelligence | Theoretical explanation | Discussion and exam |
| Fifteenth | 3 | Google Assistant (Alexa) | The Future of Artificial Intelligence | | |

Course Assessment

Grade Distribution out of 100 Based on Student Tasks, such as daily preparation, quizzes, oral exams, monthly written exams, reports, etc

12. Learning and Teaching Resources

| | |
|---|---|
| Required Textbooks (Prescribed curriculum, if applicable) | |
| Primary References (Main sources) | |
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | WANG, Jie. <i>Computer network security</i> . Berlin/Heidelberg, Germany: Springer, 2009. |
| Electronic References and Internet Resources | |

| | | | | | |
|--|--------------|--|----------------------------|------------------------|--------------------------|
| 1. Course Title | | | | | |
| Eye health1, | | | | | |
| 2.Course Code | | | | | |
| EYH18201 | | | | | |
| 3. Semester/year | | | | | |
| First Semester / Second Stage | | | | | |
| 4.Date of Preparation of this Description | | | | | |
| 2025\3\20 | | | | | |
| 5.Available Forms of Attendance . | | | | | |
| Direct in-person | | | | | |
| 6.Total Contact Hours / Total Credit Units . | | | | | |
| 6 hours per week (2 theoretical, 4 practical) / 4 credit units | | | | | |
| 7.Name of the Course Coordinator | | | | | |
| Name: Mohammed Abd Muhaimid Email: mohamedmohaimed5@gmail.com | | | | | |
| 8. Course Objectives | | | | | |
| Course Objectives | | A comprehensive understanding of each disease that may affect the eye, along with methods of early diagnosis, in order to provide guidance and advice, and refer patients to specialists for appropriate treatment. | | | |
| 9. Teaching and Learning Strategies | | | | | |
| Strategy: | | Delivering lectures using various presentation methods such as PowerPoint, videos, and quizzes. | | | |
| 10. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
| the first | | Introduction: review of anatomy & physiology the eye | | | |
| the second | | | | | |
| the third | | | | | |

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|------------|--|---|--|--|--|
| Fourth | | Introduction: history & examination of the eye | | | |
| Fifth | | | | | |
| Sixth | | | | | |
| Seventh | | Introduction: certain ophthalmic terms. (terminology(| | | |
| Eighth | | | | | |
| Ninth | | | | | |
| tenth | | Primary eye care | | | |
| eleventh | | Primary eye care | | | |
| twelfth | | Screening procedures in ophthalmology | | | |
| thirteenth | | | | | |
| fourteenth | | Screening procedures in ophthalmology | | | |
| fifteenth | | School eye screening programs Concept of community ophthalmology sticky eye, watery eye Concept of community ophthalmology flashes of light, floating object in visual field | | | |

| | | | | | |
|--|--|--|--|--|--|
| | | <p>Concept of community ophthalmology long term glaucoma monitoring</p> <p>The epidemiology of blindness (general principles(</p> <p>The epidemiology of blindness (disease specific strategy(</p> <p>The right to sight (vision 2020(</p> <p>Revision</p> | | | |
|--|--|--|--|--|--|

11.Course Assessment

Grade Distribution out of 100:

Coursework: 25 marks (theoretical) + 15 marks (practical)

Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks,

12. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (Prescribed curriculum, if applicable) | Lectures and Activities within the Lessons Reference: <i>Kanski – Ophthalmology</i> |
| Primary References (Main sources) | <i>Ophthalmolog</i> Kanski |
| Recommended Supplementary Books and References (e.g., | |

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| scientific journals, reports, etc.) | |
| Electronic References and Internet Resources | Medscape, UpToDate |

| | |
|--|---|
| 13. Course Title | |
| Eye health2, | |
| 14. Course Code | |
| EYH18202 | |
| 15. Semester/year | |
| Second Course / Second Stage | |
| 16. Date of Preparation of this Description | |
| 2025\3\20 | |
| 17. Available Forms of Attendance . | |
| In person | |
| 18. Total Contact Hours / Total Credit Units . | |
| 6 hours per week (2 theoretical, 4 practical) / Number of credits: 4 | |
| 19. Name of the Course Coordinator | |
| Name: Mohammed Abd Muhaimid | |
| Email: mohamedmohaimed5@gmail.com | |
| 20. Course Objectives | |
| Course Objectives: | To gain an in-depth understanding of all diseases that may affect the eye, with a focus on early diagnosis, as well as providing guidance, advice, and referring patients to specialists for proper treatment. |
| 21. Teaching and Learning Strategies: | |
| Strategy | livering lectures using various presentation methods such as PowerPoint, videos, and quizzes. |

| 22.Course Structure | | | | | |
|---------------------|-------|--|---------------------|-----------------|-------------------|
| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
| first | | National program for control of blindness | | | |
| Second | | | | | |
| Third | | National program for control of blindness | | | |
| Fourth | | Acute loss of vision, differential diagnosis | | | |
| Fifth | | Acute loss of vision, differential diagnosis | | | |
| Sixth | | Gradual loss of vision | | | |
| Seventh | | Gradual loss of vision | | | |
| Eighth | | Painful eye: differential diagnosis | | | |
| Ninth | | Painful eye: differential diagnosis | | | |

| | | | | | |
|--|--|--|--|--|--|
| Tenth | | Red eye: differential diagnosis | | | |
| Eleventh | | Red eye: differential diagnosis | | | |
| Twelfth | | Information, education and communication | | | |
| Thirteenth | | Rehabilitation of visually handicapped | | | |
| Fourteenth | | Rehabilitation of visually handicapped | | | |
| fifteenth | | National program for control of blindness | | | |
| | | Revision | | | |
| 23. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks (theoretical) + 15 marks (practical) Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks, | | | | | |
| 24. Learning and Teaching Resources | | | | | |
| Required Textbooks (Prescribed curriculum, if applicable) | | | Lectures and Activities Within the Lessons | | |
| Primary References (Main sources) | | | <i>Kanski</i> – Ophthalmology Reference Book | | |

| | |
|---|--------------------|
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | |
| Electronic References and Internet Resources | Medscape, UpToDate |

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|---|
| 25. :Course Title |
| Arabic Language |
| 26.:Course Code |
| ARL18202 |
| 27. Semester/year |
| Second Semester – Academic Year 2024/2025 |
| 28. Date of Preparation of this Description |
| 20 / 3 /2025 |
| 29. Available Forms of Attendance |
| In the Class |
| 30. Total Contact Hours / Total Credit Units . |
| 30 total hours / 2 hours per week / 2 credit units |
| 31. Name of the Course Coordinator |
| Name: Asst. Lecturer Nawras Salman Abdullateef Email: nawras.s.abdullateef@uruk.edu.iq |
| 32. Course Objectives . |

| | |
|-------------------|---|
| Course Objectives | <p>Introduce students to the principles of the Arabic language</p> <p>Familiarize students with Arabic grammar and syntax</p> <p>Develop cognitive and behavioral skills within the framework of the Arabic language</p> <p>Highlight the living human dimension of Arabic among contemporary world languages</p> <p>Enable students to fully understand what they read and write</p> |
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33. Teaching and Learning Strategies:

| | |
|-----------------|---|
| Strategy | Lecturing, using the method of explanation and clarification with discussion and dialogue, quick quizzes. |
|-----------------|---|

34. Course Structure

| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
|------|----------|----------------------------|-------------------------|----------------------|-----------------------|
| 1 | One hour | | Qur'anic Expression: | Delivering a Lecture | Questions and Answers |
| 2 | One Hour | | Grammatical and | Delivering a Lecture | Questions and Answers |
| 3 | One Hour | | Rhetorical Aspects | Delivering a Lecture | Questions and Answers |
| 4 | One Hour | | The Poet Badr Shakir | Delivering a Lecture | Questions and Answers |
| | One Hour | | al-Sayyab | Delivering a Lecture | Questions and Answers |
| | One Hour | | Primary and Secondary | Delivering a Lecture | Questions and Answers |
| 6 | One Hour | | Case Endings (I'rab | Delivering a Lecture | Questions and Answers |
| 7 | One Hour | | Signs) | Delivering a Lecture | Questions and Answers |
| 8 | One Hour | | The Nominal Sentence | Delivering a Lecture | Questions and Answers |
| 9 | One Hour | | (Subject and Predicate) | Delivering a Lecture | Questions and Answers |
| | One Hour | | "Inna" and its Sisters | Delivering a Lecture | Questions and Answers |
| 10 | One Hour | | The Difference | Delivering a Lecture | Questions and Answers |
| 11 | One Hour | | Between "Inna" and | Delivering a Lecture | Questions and Answers |
| | | | "Anna" | Delivering a Lecture | Questions and Answers |

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|----|----------|--|--|----------------------|-----------------------|
| 12 | One Hour | | "Kana" and its Sisters | Delivering a Lecture | Answers |
| 13 | One Hour | | The Five Verbs | Delivering a Lecture | Questions and Answers |
| 14 | One Hour | | Linguistic Errors | Delivering a Lecture | Questions and Answers |
| 15 | One Hour | | Synonyms and Antonyms | Delivering a Lecture | |
| | | | The Dual Form and Its I'rab (Declension) | | |
| | | | Sound Masculine Plural | | |
| | | | Sound Feminine Plural | | |

35.Course Assessment

Grade Distribution out of 100 Based on Student Tasks, such as daily preparation, .quizzes, oral exams, monthly written exams, reports, etc

36. Learning and Teaching Resources

| | |
|--------------------------------------|---|
| Prescribed Textbooks (if available): | |
| Main References (Sources): | Sharh Ibn Aqeel on Alfiya Ibn Malik The Most Important Rules of Arabic Spelling by Dr. Fares Abdul Salam |

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|--------------------------------------|
| 1. Course Title |
| Eye problems in systemic disorders 1 |
| 2. Course Code |
| DMS18301 |
| 3. Semester/year |
| Third year/ first semester |

| 4. Date of Preparation of this Description | | | | | |
|--|-------|---|---------------------|-----------------|-------------------|
| 2025\3\20 | | | | | |
| 5. Available Forms of Attendance | | | | | |
| In Person | | | | | |
| 6. Total Contact Hours / Total Credit Units . | | | | | |
| 3 hours per week (1 theoretical, 3 practical) / Number of credits: 3 | | | | | |
| 7. Name of the Course Coordinator | | | | | |
| Name: Mohammed Abd Muhaymid | | | | | |
| Email: mohamedmohaimed5@gmail.com | | | | | |
| 8. Course Objectives | | | | | |
| Course Objectives | | Specific objective: To identify eye problems associated with certain chronic internal and neurological diseases, and to learn how to diagnose and treat them. | | | |
| 9. Teaching and Learning Strategies | | | | | |
| Strategy | | Delivering lectures using various presentation methods such as PowerPoint, videos, and quizzes. | | | |
| 10. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
| the first | | Trauma to the eye, lids, foreign body. | | | |
| the second | | Trauma, chemical injuries | | | |
| the third | | Diabetic eye disease, pathophysiology. | | | |
| Fourth | | Diabetic eye complications. | | | |
| Fifth | | Hypertension pathophysiology. | | | |
| Sixth | | Hypertensive eye | | | |
| Seventh | | | | | |
| Eighth | | | | | |

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|------------|--|---|--|--|--|
| Ninth | | disease. | | | |
| tenth | | Ocular side effects of systemic medication. | | | |
| eleventh | | | | | |
| twelfth | | Thyroid eye disease, | | | |
| thirteenth | | Thyroid gland anatomy and physiology. | | | |
| fourteenth | | | | | |
| fifteenth | | Ocular manifestations associated with thyroid gland problems | | | |
| | | Ocular manifestations associated with blood disorders, sickle cell anemia, thalassemia, Blitiyscarasis & Tumor. | | | |
| | | Ocular manifestations associated with blood disorders, retinal venous occlusive disease and retinal arterial occlusive disease. | | | |
| | | Ocular manifestations associated with systemic infections, viral, bacterial, | | | |

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|---|--|---|--|--|--|
| | | <p>fungal and autoimmune diseases.</p> <p>Ocular manifestations in neurological disorders.</p> <p>Ophthalmic manifestations of systemic neoplasia.</p> <p>Revision.</p> | | | |
| 11. Course Assessment | | | | | |
| <p>Grade Distribution out of 100:</p> <p>Coursework: 25 marks (theoretical) + 15 marks (practical)</p> <p>Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks,</p> | | | | | |
| 12. Learning and Teaching Resources | | | | | |
| • Required Textbooks (Prescribed curriculum, if applicable) | Lectures and Activities within the Lessons: | | | | |
| Primary References (Main sources) | <i>Kanski – Clinical Ophthalmology</i> (Ophthalmology Reference) | | | | |
| Recommended Supplementary Books and References (e.g., scientific journals, | | | | | |

| | |
|--|----------------------|
| reports, etc.) | |
| Electronic References and Internet Resources | Medscape, Up To Date |

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|--|-------|---|---|-----------------|-------------------|
| 37. Course Title . | | | | | |
| Eye problems in systemic disorders 2 | | | | | |
| 38. Course Cod | | | | | |
| DMS18302 | | | | | |
| 39. Semester/year | | | | | |
| Third year/Second Semester | | | | | |
| 40. Date of Preparation of this Description | | | | | |
| 2025\3\20 | | | | | |
| 41. Available Forms of Attendance . | | | | | |
| In person | | | | | |
| 42. Total Contact Hours / Total Credit Units | | | | | |
| 4 hours per week (1 theoretical, 3 practical) / Number of credits: 3 | | | | | |
| 43. Name of the Course Coordinator | | | | | |
| Name: Mohammed Abd Muhaymid Email: mohamedmohaimed5@gmail.com | | | | | |
| 44. Course Objectives | | | | | |
| Course Objectives | | | Specific objective: To identify eye problems associated with certain chronic internal and neurological diseases, and to learn how to diagnose and treat them. | | |
| 45. Teaching and Learning Strategies | | | | | |
| Strategy: | | Delivering lectures using various presentation methods such as PowerPoint, videos, and quizzes. | | | |
| 46. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
| the first | | Brain lesions, multiple sclerosis, types of | | | |

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|------------|--|---|--|--|--|
| the second | | headaches, stroke. | | | |
| the third | | Intracranial lesion, hematoma, trauma to the head. | | | |
| Fourth | | | | | |
| Fifth | | Pathophysiology of cerebrovascular accident, transient ischemic attack. | | | |
| Sixth | | | | | |
| Seventh | | Physiology of cerebral spinal fluid, hydrocephalus. | | | |
| Eighth | | | | | |
| Ninth | | Intracranial aneurysm, symptoms causes and treatment. | | | |
| tenth | | | | | |
| eleventh | | Neurological infections, brain infections, meninges, spinal cord infections, encephalitis and meningitis. | | | |
| twelfth | | | | | |
| thirteenth | | | | | |
| fourteenth | | Neuroinfectious diseases, HIV, harvesters, herpes simplex. | | | |
| fifteenth | | Syphilis, toxoplasmosis, sarcoidosis, causes, symptoms and treatment. | | | |
| | | Demyelinating disorders, types and symptoms. | | | |
| | | Demyelinating disorders, causes and treatment. | | | |
| | | Hereditary diseases | | | |

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|--|--|---|--|--|--|
| | | affecting the eye. Hereditary diseases affecting the eye. Degenerative eye diseases. Ophthalmoplegia, causes, symptoms, management and risk factors Revision. | | | |
|--|--|---|--|--|--|

47. Course Assessment

Grade Distribution out of 100:
Coursework: 25 marks (theoretical) + 15 marks (practical)
Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks,

48. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (Prescribed curriculum, if applicable) | Lectures and Activities Within the Lessons <i>Kanski – Ophthalmology Reference Book</i> |
| Primary References (Main sources) | <i>Kanski – Ophthalmology Reference Book</i> |
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | |
| Electronic References and Internet Resources | Medscape, up to date |

49. Course Title .

Pediatric Ophthalmology

50. Course Code

POP18400

51. Semester/year .

Fourth year/Semester/year

| | | | | | |
|---|--------------|---|---|------------------------|--------------------------|
| 52. Date of Preparation of this Description | | | | | |
| 2025\3\20 | | | | | |
| 53. Available Forms of Attendance | | | | | |
| In person | | | | | |
| 54. Total Contact Hours / Total Credit Units . | | | | | |
| 6 hours per week (2 theoretical, 4 practical) / Number of credits: 8 | | | | | |
| 55. Name of the Course Coordinator | | | | | |
| Name: Mohammed Abd Muhaymid Email: mohamedmohaimed5@gmail.com | | | | | |
| 56. Course Objectives | | | | | |
| Course Objectives | | The student should be familiar with pediatric examination, diagnosing eye diseases, and attempting treatment. | | | |
| 57. Teaching and Learning Strategies | | | | | |
| Strategy | | Delivering lectures using various presentation methods such as PowerPoint, videos, and quizzes. | | | |
| 58. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit or Topic Title | Teaching Method | Assessment Method |
| 59. Course Assessment | | | | | |
| <p>Grade Distribution out of 100:</p> <p>First Semester: 20 marks (12 theoretical + 8 practical),</p> <p>Second Semester: 20 marks (12 theoretical + 8 practical)</p> <p>Total Coursework: Sum of First and Second Semester marks</p> <p>Final Practical Exam: 25 marks</p> <p>Final Theoretical Exam: 35 marks</p> | | | | | |
| 60. Learning and Teaching Resources | | | | | |
| Required Textbooks (Prescribed curriculum, if applicable) | | | Lectures and Activities within the Lessons | | |
| Primary References (Main sources) | | | Nelson_Textbook_of_Pediatrics_22nd_edition_2024 | | |

| | |
|--|----------------------|
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | |
| Electronic References and Internet Resources | Medscape, up to date |

Course Description Template

| | | | | | |
|---|--------------|--|---------------------------|------------------------|--------------------------|
| Course Title | | | | | |
| Biostatistics | | | | | |
| Course Code: | | | | | |
| STA18201 | | | | | |
| Academic Year / Subject: | | | | | |
| Annual – Second Stage, Department of Optics, 2024–2025 | | | | | |
| Date of Description Preparation: | | | | | |
| 22/3/2025 | | | | | |
| Available Attendance Mode | | | | | |
| In person | | | | | |
| 8 Total Credit Hours / Units | | | | | |
| Course Coordinator (If more than one, list all) | | | | | |
| Name: Asst. Prof. Dr. Ankin Antranek Hayk Email: ankenhayk@uruk.edu.iq | | | | | |
| Course Objectives | | | | | |
| Course Objectives | | 1 Introducing students to statistical concepts. 2 Enabling students to identify different types of data. 3 Enabling students to understand statistical measures and how to apply them in solving problems across various applications. | | | |
| Teaching and Learning Strategies | | | | | |
| Strategy | | Developing curricula aligned with accredited scientific standards and delivering theoretical lectures using presentation screens and internet-based programs. | | | |
| Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |

| | | | | | |
|----|---|------------------------|--|-------------------------|---------------------------|
| 1 | 2 | Knowledge | Def. Biostatistics , Statistics | In-person attendance | Daily and monthly exam |
| 2 | 2 | Knowledge Knowledge | Type of data ,Sample , Population | | |
| 3 | 2 | Knowledge | Scientific method of research | In-person attendance | Daily and monthly exam |
| 4 | 2 | Knowledge | Example , Exercies | In-person attendance | Daily and monthly exam |
| 5 | 2 | Knowledge | Type of Random Sample | | |
| 6 | 2 | Knowledge | Type of non random sample | In-person attendance | Daily and monthly exam |
| 7 | 2 | Knowledge | Type of table | In-person attendance | Daily and monthly exam |
| 8 | 2 | Knowledge | Constract frequency dist. | In-person attendance | Daily and monthly exam |
| 9 | 2 | Knowledge | Discrete and continuous variable | In-person attendance | Daily and monthly exam |
| 10 | 2 | Knowledge | Example | | |
| 11 | 2 | Knowledge | Exercies | In-person attendance | Daily and monthly exam |
| 12 | 2 | Knowledge | Measure of Central Tendency | In-person attendance | Daily and monthly exam |
| 13 | 2 | Knowledge | Mean , Quadratic , Harmonic , Geometric | In-person attendance | Daily and monthly exam |
| 14 | 2 | Knowledge | Relation between mean , median , mode | | |
| 15 | 2 | Knowledge Knowledge | H.W. | In-person attendance | Daily and monthly exam |
| 16 | 2 | Knowledge | Mean , Measures of Dispersion (Range , variance) | In-person attendance | Daily and monthly exam |
| 17 | 2 | Knowledge | Standard Deviation , Coefficient of Variation | In-person attendance | Daily and monthly exam |
| 18 | 2 | Knowledge | Mean deviation , Example | | |
| 19 | 2 | Knowledge | | In-person | |

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|----|---|-----------|---------------------------------------|----------------------|------------------------|
| 20 | 2 | Knowledge | H.W | attendance | Daily and monthly exam |
| 21 | 2 | Knowledge | Correlation and Regression | In-person attendance | Daily and monthly exam |
| 22 | 2 | Knowledge | Simple Linear Correlation | In-person attendance | Daily and monthly exam |
| 23 | 2 | Knowledge | Partial Linear Correlation | In-person attendance | Daily and monthly exam |
| 24 | 2 | Knowledge | H.W | In-person attendance | Daily and monthly exam |
| 25 | 2 | Knowledge | Regression | In-person attendance | Daily and monthly exam |
| 26 | 2 | Knowledge | Simple Linear Regression | In-person attendance | Daily and monthly exam |
| 27 | 2 | Knowledge | Multiple Linear Regression | In-person attendance | Daily and monthly exam |
| 28 | 2 | Knowledge | H.W. | In-person attendance | Daily and monthly exam |
| 29 | 2 | Knowledge | Hypothesis Testing , significant test | In-person attendance | Daily and monthly exam |
| 30 | 2 | Knowledge | Statistical Analysis | In-person attendance | Daily and monthly exam |
| 54 | 2 | Knowledge | H.W. | In-person attendance | Daily and monthly exam |
| 5 | | | | In-person attendance | Daily and monthly exam |
| 6 | | | | In-person attendance | Daily and monthly exam |
| 7 | | | | In-person attendance | Daily and monthly exam |
| 8 | | | | In-person attendance | Daily and monthly exam |
| 90 | | | | In-person attendance | Daily and monthly exam |
| 12 | | | | In-person attendance | Daily and monthly exam |
| 13 | | | | In-person attendance | Daily and monthly exam |
| 14 | | | | In-person attendance | Daily and monthly exam |
| 15 | | | | In-person attendance | Daily and monthly exam |

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| | | | | | Daily and monthly exam |
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| | | | | | Daily and monthly exam |
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| | | | | | |
| Course Assessment | | | | | |
| <p align="right">Grade Distribution out of 40:</p> <p>The continuous assessment is based on tasks assigned to the student, such as daily preparation, quizzes (written and oral), monthly exams, written assessments, reports, and other related activities.</p> | | | | | |
| Learning and Teaching Resources | | | | | |
| Prescribed Textbooks (Curricular, if available) | | | Biostatistics – authored by Prof. Dr. Ziyad Al-Rawi Statistics – authored by Dr. Khasha’ Al-Rawi Statistics – authored by Assist. Prof. Amir Hanna | | |
| Main References (Sources) | | | Wayne W. Daniel: Biostatistics “ Basic concepts and | | |

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| | methodology for the Health sciences ‘ 9 th Edition2010 statistic |
| Recommended Supplementary Books and References (e.g., scientific journals, reports...) | |
| Electronic References and Websites | Biostatistics 10th Edition |

Course Description Template

| | |
|--|---|
| Course Title | |
| Ophthalmic Diseases | |
| Course Code | |
| DIE18400 | |
| Academic Year / Type of Course | |
| 2025-2024 | |
| Date of Description Preparation | |
| 2025-04-29 | |
| Available Attendance Mode | |
| In-person | |
| Total Credit Hours / Units | |
| 6 hours per week (2 theoretical and 4 practical) / Total Units: 8 | |
| :Course Coordinator (If more than one, list all) | |
| Name: Dr. Aqeel Hadi Tahir | |
| Email: akeel_ alassadi57@yahoo.com | |
| Course Objectives | |
| <div> <div>General Objective:</div> <div>To enable the student to understand the full range of diseases and injuries that may affect the eye.</div> </div> <div> <div>Specific Objective:</div> <div>To provide in-depth knowledge of each potential eye disease, including methods of early diagnosis, with the aim of guiding, advising, and referring patients to specialists for appropriate treatment.</div> </div> | <div>.....</div> <div>.....</div> <div>.....</div> |
| Teaching and Learning Strategies | |
| Strategy | Delivering lectures using a variety of presentation methods, including PowerPoint, videos, and quizzes. |
| Course Structure | |

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
|----------|-------|---|--------------------|-----------------|-------------------|
| First | | Diseases of the orbit (infection) | | | |
| Second | | Diseases of the eye lids (infections, viral, bacterial, allergic) | | | |
| Third | | Diseases of the eye lids (ptosis, ectropion & entropion) | | | |
| Fourth | | lacrimal drainage diseases(causes & evaluation) | | | |
| Fifth | | lacrimal drainage diseases (obstruction & infection) | | | |
| Sixth | | Diseases of the conjunctiva(infections, viral, bacterial) | | | |
| Seventh | | Diseases of the conjunctiva (allergic conjunctivitis& degenerative Diseases of the conjunctiva) | | | |
| Eighth | | Disorders of the cornea inflammation(infection &allergic) | | | |
| Ninth | | Anomalies of the Cornia (congenital)(micro cornia) megalux cornia ,sclera cornia ,keratoconus, Anophthalmus. | | | |
| Tenth | | Diseases of the crystalline lens abnormalities of (shape,act0pis) | | | |
| | | Cataracts congenital | | | |
| Eleventh | | Cataract - acquired | | | |

| | | | | | |
|----------------|--|--|--|--|--|
| Twelfth | | Diseases of uveal tract(uveitis, infection, fungal, bacterial) | | | |
| □ Thirteenth | | Anterior & posterior uveitis. | | | |
| Fourteenth | | Vitreous opacities (introduction, Vitreous hemorrhage) | | | |
| Fifteenth | | Cholesterics bulb, Vitreous cyst. | | | |
| Sixteenth | | Diseases retina – retinopathy (diabetic, hypertensive &retinopathy of prematurity) | | | |
| Seventeenth | | | | | |
| Eighteenth | | Age related macular regeneration | | | |
| Nineteenth | | Retinal detachment | | | |
| Twentieth | | Hereditary fundus dystrophies | | | |
| Twenty-first | | Glaucoma(introduction & tonometeies) | | | |
| Twenty-second | | Types of Glaucoma (open angle , closed angle) | | | |
| Twenty-third | | Primary congenital Glaucoma | | | |
| Twenty-fourth | | Normal pressure Glaucoma | | | |
| Twenty-fifth | | Pseudo exhalation | | | |
| Twenty-sixth | | | | | |
| Twenty-seventh | | Trauma, orbital fracture &trauma to the globes , eyelid trauma | | | |
| Twenty-eighth | | Chemical injuries | | | |

| | | | | | |
|---|--|--|--|--|--|
| Twenty-ninth | | Ocular side effect of systemic medication (Cornea, lens) | | | |
| Thirtieth | | Ocular side effect of systemic medication (uveitis, retina) (optic nerve) | | | |
| Course Assessment | | | | | |
| Grade Distribution (out of 100): Based on student-assigned tasks such as daily preparation, quizzes, oral and written exams (weekly and monthly), reports, and other assignments. | | | | | |
| c | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | | | |
| Main References (Sources) | | | | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

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

| |
|--|
| 1. Course Title |
| Crimes of the Ba'ath Regime in Iraq |
| 2. :Course Code |
| CRB18201 |
| :3. Academic Year / Type of Course |
| First Semester – Academic Year 2024/2025 |
| :4. Date of Description Preparation |

22/3/2025

:5. Available Attendance Mode

In Class

. 6. Total Study Hours: 6 | Weekly Hours: [insert number] | Credit Units: [insert number]

Total Study Hours: 30 | Weekly Hours: 2 | Credit Units: 2

7. Name of Course Coordinator (*List all names if more than one*)**Name:** Dr. Sameh Abdullatif Ali**Email:** Master121Sam@gmail.com**8. Course Objectives .****Course Objectives**

1. To enable students to recognize the numerous crimes committed by the defunct Ba'ath regime against various components and segments of the Iraqi people, in order to foster awareness and rejection of all forms of oppression and authoritarianism, and to promote the demand for civil and political rights as guaranteed by the Constitution.
- 2 To familiarize students with the content of both national and international laws that guarantee human rights and freedom of expression, while also enhancing their legal awareness to reject any form of violation, whether within their own country or abroad.
3. To introduce students to the statutes of the International Criminal Court and the Iraqi High Criminal Court (established in 2005), which documented the crimes against humanity committed by the former Ba'ath regime during its time in power.

9. Teaching and Learning Strategies**Strategy**

Lecturing, discussion and dialogue methods, brainstorming, and short quizzes

10. Course Structure .

| Week | Hours | Learning Method | Unit / Topic Title | Assessment Method | Learning Method |
|------|----------|--|--|------------------------|-----------------------|
| 1 | One hour | Introduce students to the crimes committed by the Ba'ath regime. | The concept and classifications of crimes | Delivering the Lecture | Questions and Answers |
| 2 | One hour | Distinguish between the concept and classifications of crimes. | Definition of crime: linguistically and legally | Delivering the Lecture | Questions and Answers |
| 3 | One hour | Clarify terminology and legal language related to criminal law. | Categories of crimes | Delivering the Lecture | Questions and Answers |
| 4 | One hour | Identify the different categories of crimes. | Types of international crimes | Delivering the Lecture | Questions and Answers |
| 5 | One hour | Understand the various types of international crimes. | Rulings issued by the Criminal Court | Delivering the Lecture | Questions and Answers |
| 6 | One hour | Study the rulings issued by the International Criminal Court. | Psychological and social crimes, and the most prominent violations committed by the Ba'ath Party | Delivering the Lecture | Questions and Answers |
| 7 | One hour | Examine psychological and social crimes, as well as the major human rights violations committed by the Ba'ath Party. | The concept and classifications of crimes | Delivering the Lecture | Questions and Answers |
| 8 | One hour | Explore the nature and impact of psychological crimes. | Psychological Crimes | Delivering the Lecture | Questions and Answers |
| 9 | One hour | Understand the mechanisms of psychological crimes. | Mechanisms of Psychological Crimes | Delivering the Lecture | Questions and Answers |

| | | | | | |
|----|----------|--|---|------------------------|-----------------------|
| 10 | One hour | Understand the effects of psychological crimes. | Effects of Psychological Crimes | Delivering the Lecture | Questions and Answers |
| 11 | One hour | Identify the nature of social crimes. | Social Crimes | Delivering the Lecture | Questions and Answers |
| 12 | One hour | Clarify the concept of the militarization of society. | Militarization of Society | Delivering the Lecture | Questions and Answers |
| 13 | One hour | Examine the Ba'ath Party's stance toward religion. | The Ba'ath Party's Stance on Religion | Delivering the Lecture | Questions and Answers |
| 14 | One hour | Analyze violations of Iraqi national laws. | Violations of Iraqi Laws | Delivering the Lecture | Questions and Answers |
| 15 | One hour | Identify forms of human rights violations. | Forms of Human Rights Violations | Delivering the Lecture | Questions and Answers |
| 16 | One hour | Review selected rulings on political violations. | Selected Rulings on Political Violations | Delivering the Lecture | Written Exam |
| 17 | One hour | Locate prisons and detention centers used by the regime. | Locations of Prisons and Detention Centers | Delivering the Lecture | Questions and Answers |
| 18 | One hour | Study the environmental crimes committed by the Ba'ath regime. | Environmental Crimes Committed by the Ba'ath Regime | Delivering the Lecture | Questions and Answers |
| 19 | One hour | Understand the impact of war-related pollution. | War-Related Pollution | Delivering the Lecture | Questions and Answers |
| 20 | One hour | Examine the destruction of cities and villages. | Destruction of Cities and Villages | Delivering the Lecture | Questions and Answers |

| | | | | | |
|------------------------|----------|--|---|------------------------|-----------------------|
| 21 | One hour | Study the draining of the marshlands. | Draining of the Marshlands | Delivering the Lecture | Questions and Answers |
| 22 | One hour | Examine the bulldozing of orchards. | Bulldozing of Orchards | Delivering the Lecture | Questions and Answers |
| 23 | One hour | Identify mass graves. | Mass Graves | Delivering the Lecture | Questions and Answers |
| 24 | One hour | Analyze events related to genocide burial sites. | Events of Genocide Burial Sites | Delivering the Lecture | Questions and Answers |
| 25 | One hour | Understand the symbolic classification of genocide graves. | Symbolic Classification of Genocide Graves | Delivering the Lecture | Questions and Answers |
| 26 | One hour | Review documentary evidence of genocide crimes. | Presentation of Documents Related to Genocide Crimes | Delivering the Lecture | Questions and Answers |
| 27 | One hour | Examine rulings issued by the Criminal Court. | Presentation of Rulings by the Criminal Court | Video Presentation | Questions and Answers |
| 28 | One hour | Identify the charges brought against the former regime. | Charges Brought Against the Former Regime | Video Presentation | Questions and Answers |
| 29 | One hour | Analyze visual documentation of crimes. | Presentation of Visual Documentation of Crimes | Video Presentation | Questions and Answers |
| 30 | One hour | View and present visual materials documenting the crimes. | <i>(Repeated)</i> Presentation of Visual Documentation of Crimes | Video Presentation | Questions and Answers |
| .11. Course Assessment | | | | | |

The grade is distributed out of 100 based on the tasks assigned to the student, such as attendance, daily preparation, daily, oral, and monthly exams, as well as the final semester exam.

12. Teaching and Learning Resources

| | |
|---------------------------|---|
| Required Textbooks | Crimes of the Ba'ath Regime in Iraq |
| Main References (Sources) | Archive of the Political Prisoners Foundation |

Course Description Template

[illegible]

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | |
|------|-------|----------------------------|----------------------------------|-----------------|--|
| 1 | 1 | Theoretical | Unit one The tense system | Lecture | |
| 2 | 1 | Theoretical | Informal language | Lecture | |
| 3 | 1 | Theoretical | Compound word | Lecture | |
| 4 | 1 | Theoretical | Residing | Lecture | |
| 5 | 1 | Theoretical | Social expressions | Lecture | |
| 6 | 1 | Theoretical | Unit one workbook | Lecture | |
| 7 | 1 | Theoretical | Unit two Present perfect | Lecture | |
| 8 | 1 | Theoretical | Present simple and continuous | Lecture | |
| 9 | 1 | Theoretical | Hot verbs | Lecture | |
| 10 | 1 | Theoretical | Exclamation | Lecture | |
| 11 | 1 | Theoretical | Reading | Lecture | |
| 12 | 1 | Theoretical | Unit two workbook | | |
| 13 | 1 | Theoretical | exam | Exam | |
| 14 | 1 | Theoretical | Unit three Narrative tenses | Lecture | |
| 15 | 1 | Theoretical | Giving news | Lecture | |
| 16 | 1 | Theoretical | Books and films | Lecture | |
| 17 | 1 | Theoretical | Showing interest | Lecture | |
| 18 | 1 | Theoretical | Unit three workbook | Lecture | |
| 19 | 1 | Theoretical | Unit one(advance) | Lecture | |
| 20 | 1 | Theoretical | Synonyms in context | Lecture | |
| 21 | 1 | Theoretical | Reading | Lecture | |
| 22 | 1 | Theoretical | Unit one workbook | Lecture | |
| 23 | 1 | Theoretical | Unit two (advance) | Lecture | |
| 24 | 1 | Theoretical | Phrasal verbs | Lecture | |
| 25 | 1 | Theoretical | Adverb collocation | Lecture | |
| 26 | 1 | Theoretical | Describing trends | Lecture | |
| 27 | 1 | Theoretical | Exam | Lecture | |
| 28 | 1 | Theoretical | Review | Lecture | |
| 29 | 1 | Theoretical | Review | Lecture | |

| | | | | | |
|---|---|-------------|--------|---------|--|
| 30 | 1 | Theoretical | Review | Lecture | |
| | | | | | |
| The grade is distributed out of 100 | | | | | |
| | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | | | |
| Main References (Sources) | | | | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| | |
|---|---|
| 24.Course Title | |
| Refractive Errors | |
| 25. Course Code | |
| REE18201 | |
| :Academic Year / Type of Course | |
| First Semester/Second Stage | |
| 27.Date of Description Preparation | |
| 2025/5/1 | |
| 28. Available Attendance Mode | |
| In Person | |
| 29. Total Credit Hours / Units . | |
| 2 Theoretical Hours and 4 Practical Hours | |
| 30. Course Coordinator (If more than one, list all) | |
| Name: Asst. Lecturer Alaa Khammass Hussein | |
| Email: alaakhammas365@gmail.com | |
| 31.Course Objectives | |
| Course Objectives | 1 Refractive Error Examination 2 Methods of Diagnosis 3 Treatment |
| 32. Teaching and Learning Strategies | |
| Strategy | |

| 33.Course Structure | | | | | |
|---------------------|-------|----------------------------|--|-----------------|-------------------|
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | 2 | | Light | data show | Quiz |
| 2 | 2 | | Mirror & lens | data show | Quiz |
| 3 | 2 | | Visual Acuity (AV) | data show | Quiz |
| 4 | 2 | | Trial case | data show | Quiz |
| 5 | 2 | | Retinoscope (Introduction , types of movement) | data show | Quiz |
| 6 | 2 | | Retinoscope | data show | Quiz |
| 7 | 2 | | Refractive error (Define and types of R.E) | data show | Quiz |
| 8 | 2 | | Myopia (Sign and Symptoms) | data show | Quiz |
| 9 | 2 | | Myopia | data show | Quiz |
| 10 | 2 | | Hypermetropia (sign & symptoms) | data show | Quiz |
| 11 | 2 | | Hypermetropia | data show | Quiz |
| 12 | 2 | | Astigmatism | data show | Quiz |
| 13 | 2 | | Astigmatism | data show | Quiz |
| 14 | 2 | | Astigmatism (sign & symptoms) | data show | Quiz |
| 15 | 2 | | Revision | data show | Quiz |

24. Course Assessment

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

25. Learning and Teaching Resources

| | |
|--|--------------------------------|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | |
| Main References (Sources) | American academy for optometry |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| |
|-------------------------------------|
| 24. Course Title |
| Medical Glasses |
| 25. Course Code . |
| PEY18301 |
| 26. Academic Year / Type of Course |
| First Semester / Third Year |
| 27. Date of Description Preparation |
| 2025/5/1 |
| 28. Available Attendance Mode . |
| |

29. Total Credit Hours / Units .10

2 Hours Theoretical and 4 Hours Practical

30.Course Coordinator (If more than one, list all)

Name: Asst. Lecturer Alaa Khammass Hussein

Email: alaakhammas365@gmail.com

31. Course Objectives

Course Objectives

- 1 Measuring the Power of Medical Lenses
- 2 Writing the Medical Prescription
- 3 Fully Assembling Medical Glasses

32.Teaching and Learning Strategies

Strategy

33.Course Structure

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
|------|-------|----------------------------|--------------------|-----------------|-------------------|
| 1 | 2 | | | data show | Quiz |
| 2 | 2 | | | data show | Quiz |
| 3 | 2 | | | data show | Quiz |
| 4 | 2 | | | data show | Quiz |
| 5 | 2 | | | data show | Quiz |
| 6 | 2 | | | data show | Quiz |
| 7 | 2 | | | data show | Quiz |
| 8 | 2 | | | data show | Quiz |
| 9 | 2 | | | data show | Quiz |
| 10 | 2 | | | data show | Quiz |
| 11 | 2 | | | data show | Quiz |
| 12 | 2 | | | data show | Quiz |
| 13 | 2 | | | data show | Quiz |
| 14 | 2 | | | data show | Quiz |
| 15 | 2 | | | data show | Quiz |

| | | | | | |
|--|--|--|--|--|--|
| | | | Boxing system of lenses (brief). Back Vertex Distance. Revision. | | |
| 25. Course Assessment | | | | | |
| The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, monthly and written exams, reports, etc. | | | | | |
| 25. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | | | |
| Main References (Sources) | | | Medical glasses of optometry | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| | | | | | |
|---|--|-------------------|--------------------|-----------------|-------------------|
| 26. Course Title | | | | | |
| Refractive Errors | | | | | |
| 27. Course Code | | | | | |
| REF18301 | | | | | |
| 28. Academic Year / Type of Course | | | | | |
| Semester / Third Year | | | | | |
| 29. Date of Description Preparation | | | | | |
| 2025/5/1 | | | | | |
| 30. Available Attendance Mode | | | | | |
| | | | | | |
| 31. Total Credit Hours / Units | | | | | |
| 2 Theoretical Hours and 4 Practical Hours | | | | | |
| 33. Course Coordinator (If more than one, list all) 3333 | | | | | |
| Name: Asst. Lecturer Alaa Khammass Hussein Email: alaakhammas365@gmail.com | | | | | |
| 34. Course Objectives | | | | | |
| Course Objectives | 1 Examination of Refractive Error 2 Methods of Diagnosis 3 Treatment | | | | |
| 34. Teaching and Learning Strategies | | | | | |
| Strategy | | | | | |
| 35. Course Structure | | | | | |
| Week | Hours | Intended Learning | Unit / Topic Title | Learning Method | Assessment Method |

[illegible]

36. Course Assessment

37. Learning and Teaching Resources

Main References (Sources)

American academy for
optometry

Recommended Supplementary Books
and References (*Scientific journals,*
reports, etc.)

Electronic References and Internet Resources

Course Description Template

| Optical instruments1 | | | | | |
|---|-------|---|---------------------------------------|-----------------|-------------------|
| 2. Course Cod | | | | | |
| OPE18201 | | | | | |
| :Academic Year / Type of Course | | | | | |
| First Course / Second Year | | | | | |
| 4. Date of Description Preparation | | | | | |
| 2025/4/29 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In-Person Attendance | | | | | |
| 6. Total Credit Hours / Units | | | | | |
| 7 hours per week (2 theoretical and 5 practical) – Number of units: 4 | | | | | |
| :Course Coordinator (If more than one, list all) | | | | | |
| Name: Dr. Ahmed Rasool Noori | | | | | |
| Email: ahmed.noori76@yahoo.com | | | | | |
| 8. Course Objectives | | | | | |
| Course Objectives | | 1 The student should be knowledgeable about all optical devices and their uses. 2 The student should be able to operate the devices and understand how to maintain them. | | | |
| 9. Teaching and Learning Strategies | | | | | |
| Strategy | | Delivering lectures using a variety of presentation methods. | | | |
| 10. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | 2 hrs | Introduction and general information. | | |
| 2 | | | | | |
| 3 | | | General consideration | | |
| 4 | | | Ophthalmic instruments | | |
| 5 | | | decontamination | | |
| 6 | | | Risk of transmission of infection | | |
| 7 | | | in devices. | | |
| 8 | | | Risk of transmission of infection | | |
| 9 | | | in devices. | | |
| 10 | | | Test charts, trial case and frame. | | |
| 11 | | | Test charts, trial case and frame. | | |
| 12 | | | Retinoscope | | |
| 13 | | | Auto refractometer | | |
| 14 | | | Auto refractometer | | |
| 15 | | | Tonometer contact and non contact. | | |
| | | Tonometer contact and non contact. | | | |
| | | Tonometer contact and non contact. | | | |

| | | | | | |
|---|--|--|---|--|--|
| | | | Lensometer Revision | | |
| 11. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks for theoretical + 15 marks for practical, Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 12. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | Lectures | | |
| Main References (Sources) | | | Kanski, Basic and clinical science course, Clinical optics. | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| 1. Course Title | | | | | |
|--|---|----------------------------|--------------------|-----------------|-------------------|
| optical instruments2 | | | | | |
| 2. Course Code | | | | | |
| OPE 18202 | | | | | |
| 3. Academic Year / Type of Course | | | | | |
| Second Course | | | | | |
| 4.Date of Description Preparation | | | | | |
| 2025/4/29 | | | | | |
| 5.Available Attendance Mode | | | | | |
| In person attendance | | | | | |
| 6. Total Credit Hours / Units6 .1 | | | | | |
| 7 hours per week (2 theoretical and 5 practical) – Total units: 4 | | | | | |
| 7. Course Coordinator (If more than one, list all | | | | | |
| Name: Dr. Ahmed Rasool Noori | | | | | |
| Email: ahmed.noori76@yahoo.com ** | | | | | |
| 1. Course Objectives | | | | | |
| Course Objectives | 1 The student should be familiar with all optical devices and their uses. 2 The student should be able to operate the devices and perform their maintenance. | | | | |
| 2.Teaching and Learning Strategies | | | | | |
| Strategy | Delivering lectures using a variety of presentation methods. | | | | |
| 1. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | 2 | | Revision | | |
| 2 | | | | | |

| | | | | | |
|----|--|--|-----------------|--|--|
| 3 | | | Lensometer | | |
| 4 | | | Fundus camera | | |
| 5 | | | External eye | | |
| 6 | | | photography | | |
| 7 | | | Indirect | | |
| 8 | | | ophthalmoscope | | |
| 9 | | | Direct | | |
| 10 | | | ophthalmoscope | | |
| 11 | | | Corneal | | |
| 12 | | | examination- | | |
| 13 | | | Placido disc | | |
| 14 | | | Corneal | | |
| 15 | | | examination- | | |
| | | | keratometer | | |
| | | | Corneal | | |
| | | | examination- | | |
| | | | keratometer | | |
| | | | Corneal | | |
| | | | examination-vkg | | |
| | | | Corneal | | |
| | | | examination- | | |
| | | | specular | | |
| | | | microscopy | | |
| | | | Corneal | | |
| | | | examination- | | |
| | | | aesthesiometer | | |
| | | | corneal | | |
| | | | topographer | | |
| | | | corneal | | |
| | | | topographer | | |
| | | | Revision | | |

1. Course Assessment

Grade Distribution out of 100:

Coursework: 25 marks for theoretical + 15 marks for practical, **Final Practical Exam:** 25 marks, **Final Theoretical Exam:** 35 marks

2. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Lectures |
| Main References (Sources) | Kanski, Basic and clinical science course, Clinical optics |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| 1. Course Title | | | | | |
|---|-------|----------------------------|---|-----------------|-------------------|
| squint 1 | | | | | |
| 2. Course Code | | | | | |
| SQU18301 | | | | | |
| 3. Academic Year / Type of Course | | | | | |
| First Course | | | | | |
| 4. Date of Description Preparation | | | | | |
| 2025/4/29 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In person attendance | | | | | |
| 6. Total Credit Hours / Units | | | | | |
| 6 hours per week (2 theoretical and 4 practical) – Total units: 4 | | | | | |
| 7. Course Coordinator (If more than one, list all) | | | | | |
| Name: Dr. Ahmed Rasool Noori Email: ahmed.noori76@yahoo.com ** | | | | | |
| 8. Course Objectives | | | | | |
| 1 The student should be able to identify strabismus, its types, methods of diagnosis, correction, and treatment. 2 The student should be able to recognize the forms of strabismus and understand how to examine and diagnose the patient. | | | | | Course Objectives |
| 9. Teaching and Learning Strategies .1 | | | | | |
| Delivering lectures using various presentation methods | | | | | Strategy |
| 1. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Anatomy and physiology of extra .ocular muscles | | |
| 2 | | | Sensory physiology and | | |
| 3 | | | pathology. | | |
| 4 | | | Retinal correspondence. | | |
| 5 | | | Binocular eye movement. | | |
| 6 | | | Amblyopia 1. | | |
| 7 | | | Amblyopia 2. | | |
| 8 | | | Management of refractive errors in | | |
| 9 | | | childhood | | |
| 10 | | | Introduction to strabismus. | | |
| 11 | | | Laws of ocular motility. | | |
| 12 | | | Esotropia 1. congenital | | |
| 13 | | | Esotropia 2. accommodative | | |
| 14 | | | Esotropia 3. Acquired non | | |
| 15 | | | accommodative | | |
| | | | Esotropia 4. Incomitant | | |
| | | | Revision | | |

| | | | | | |
|---|--|--|--|--|--|
| | | | | | |
| 2. Course Evaluation | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks for theoretical + 15 marks for practical, Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 3. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | Lectures | | |
| Main References (Sources) | | | Kanski, Basic and clinical science course. | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| | |
|---|-------------------|
| 1. Course Title | |
| Squint 2 | |
| 2. Course Code | |
| SQU18302 | |
| 3. Academic Year / Type of Course | |
| Second Course | |
| 4. Date of Description Preparation | |
| 2025/4/29 | |
| 5. Available Attendance Mode | |
| In person | |
| 6. Total Credit Hours / Units | |
| 5 hours per week (1 theoretical and 4 practical) – Total units: 3 | |
| 7. Course Coordinator (If more than one, list all) | |
| Name: Dr. Ahmed Rasool Noori Email: ahmed.noori76@yahoo.com | |
| 8. Course Objectives | |
| 1 The student should be able to identify strabismus, its types, methods of diagnosis, correction, and treatment. 2 The student should be capable of recognizing the forms of strabismus and understanding how to examine and diagnose the patient. | Course Objectives |
| 9. Teaching and Learning Strategies | |
| Delivering lectures using a variety of presentation methods. | Strategy |

| 1. Course Structure .1 | | | | | |
|---|-----------|----------------------------------|--|--------------------|----------------------|
| Week | Hour s | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Esotropia 5 Acute esotropia | | |
| 2 | | | Esotropia 6. Surgical principles | | |
| 3 | | | Exotropia 1. | | |
| 4 | | | Exotropia 2. intermittent | | |
| 5 | | | Exotropia 3 infantile | | |
| 6 | | | Exotropia 4. sensory | | |
| 7 | | " | Exotropia 5 surgical principles | | |
| 8 | | | Pattern strabismus. | | |
| 9 | | ' | Special motility disorders 1. | | |
| 10 | | ' | Special motility disorders 2 | | |
| 11 | | | Special disorders 3 | | |
| 12 | | | Convergence insufficiency 1 | | |
| 13 | | | Convergence insufficiency 2. | | |
| 14 | | | Convergence insufficiency 3 | | |
| 15 | | | Revision | | |
| 2. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks for theoretical + 15 marks for practical, Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 3. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | Lectures | | |
| Main References (Sources) | | | Kanski, Basic and clinical science course. | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| |
|------------------------------------|
| 1.Course Title |
| physiology of the eye and vision1 |
| 2. Course Code |
| PHE18201 |
| 3. Academic Year / Type of Course |
| First course |
| 4. Date of Description Preparation |

| | | | | | |
|---|-------|--|-------------------------|-------------------|-------------------|
| 2025/4/29 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In person attendance | | | | | |
| 6. Total Credit Hours / Units | | | | | |
| 6 hours per week (2 theoretical and 4 practical) – Total units: 4 | | | | | |
| 7. Course Coordinator (If more than one, list all) .1 | | | | | |
| Name: Dr. Ahmed Rasool Noori | | | | | |
| Email: ahmed.noori76@yahoo.com | | | | | |
| 8. Course Objectives | | | | | |
| 1 Understanding the structures of the eye and their functional parts. 2 Preparing the student with foundational knowledge to comprehend specialized courses based on physiology. | | | | Course Objectives | |
| 1. Teaching and Learning Strategies | | | | | |
| Strategy | | Delivering lectures using a variety of presentation methods. | | | |
| 2. Course Structure .2 | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Visual acuity | | |
| 2 | | | Visual acuity | | |
| 3 | | | Binocular vision | | |
| 4 | | | Optics and refraction | | |
| 5 | | | Optics and refraction | | |
| 6 | | " | Stereopsis | | |
| 7 | | | Pupillary reflex | | |
| 8 | | | Extrinsic muscle action | | |
| 9 | | " | Eye movement | | |
| 10 | | " | Cornea and sclera | | |
| 11 | | | Cornea | | |
| 12 | | | Cornea | | |
| 13 | | | Aqueous humor | | |
| 14 | | | Aqueous humor and IOP | | |
| 15 | | | The lens | | |
| 3. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks for theoretical + 15 marks for practical, Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 4. Learning and Teaching Resources | | | | | |

| | |
|--|---|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Lectures |
| Main References (Sources) | Kanski, Basic and clinical science course, The eye |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| | | | | | |
|---|--|----------|--------------------|----------|------------|
| 1. Course Title | | | | | |
| Physiology of the eye and vision2 | | | | | |
| 2. Course Code | | | | | |
| PHE18202 | | | | | |
| Academic Year / Type of Course | | | | | |
| Second Course | | | | | |
| 4. Date of Description Preparation | | | | | |
| 2025/4/29 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In person | | | | | |
| 6. Total Credit Hours / Units | | | | | |
| 6 hours per week (2 theoretical and 4 practical) – Number of units: 4 | | | | | |
| 7. Course Coordinator (If more than one, list all | | | | | |
| Name: Dr. Ahmed Rasool Noori | | | | | |
| Email: ahmed.noori76@yahoo.com | | | | | |
| 8. Course Objectives . | | | | | |
| Course Objectives | Understanding the structures of the eye and its functional components. Preparing the student's knowledge to comprehend specialized courses based on physiology. | | | | |
| 9. Teaching and Learning Strategies | | | | | |
| Strategy | Delivering lectures using a variety of presentation methods. | | | | |
| 10. Course Structure .1 | | | | | |
| Week | Hours | Intended | Unit / Topic Title | Learning | Assessment |

| | | Learning Outcomes | | Method | Method |
|----|--|-------------------|------------------------------------|--------|--------|
| 1 | | | The lens | | |
| 2 | | | The lens and accommodation | | |
| 3 | | | Mechanism of accommodation | | |
| 4 | | | Optics and refraction | | |
| 5 | | | Lacrimal system and tears | | |
| 6 | | " | Vitreous anatomy | | |
| 7 | | | Aging of vitreous | | |
| 8 | | | Retina histology and function | | |
| 9 | | ' | Retina | | |
| 10 | | ' | Retina | | |
| 11 | | | Color blindness | | |
| 12 | | | High visual center | | |
| 13 | | | Perimetry and visual field testing | | |
| 14 | | | Perimetry and visual field testing | | |
| 15 | | | Revision | | |

11. Course Assessment

Grade Distribution out of 100:

Coursework: 25 marks for theoretical + 15 marks for practical, **Final Practical Exam:** 25 marks, **Final Theoretical Exam:** 35 marks

12. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Lectures |
| Main References (Sources) | Kanski, Basic and clinical science course, The eye |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| |
|-------------------------------------|
| 38. Course Title |
| Squint 2 |
| Course Code .11 |
| SQU18400 |
| 40. Academic Year / Type of Course |
| 2025-2024 |
| 41. Date of Description Preparation |
| 2025-1-1 |
| 42. Available Attendance Mode |
| In person |
| 43. Total Credit Hours / Units |
| 6 hours |

| | |
|---|---|
| 44. Course Coordinator (If more than one, list all) | |
| Name: Dr. Sama Mahmood Email: samaaalbaghdadi@gmail.com | |
| 45. Course Objectives | |
| The program aims to teach the student about the different types of strabismus, how to diagnose it, and the principles of its treatment. | |
| 1 Understanding the muscles and the nerves that innervate them, as well as their functions. | |
| 2 Understanding the equipment required to diagnose strabismus and the conditions associated with it. | |
| 3 Understanding the types of strabismus. | |
| 4 Understanding the fundamental principles for treating strabismus. | |
| 46. Teaching and Learning Strategies | |
| :Strategy | 1 Enabling the student to understand the function of the eye muscles and their innervating nerves. 2 Enabling the student to identify and use the devices used in diagnosing strabismus and its associated conditions. 3 Enabling the student to understand the principles of strabismus treatment using medical devices. |
| Course Structure .12 | |

10. Course Structure

| Week | Hours | Intended Learning Outcomes | Unit Name / Topic | Method of Learning | Assessment Method |
|------|-------|--|---|-------------------------|---|
| .1 | | Study, knowledge, and practical application. | Convergence , examination by synoptophore | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .2 | | Study, knowledge, and practical application. | Convergence , examination by synoptophore | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .3 | | Study, knowledge, and practical application. | Heterophoria (definition , types, causes, symptoms) | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .4 | | Study, knowledge, and practical application. | Heterophoria (definition , types, causes, symptoms) | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .5 | | Study, knowledge, and practical application. | Heterophoria (diagnosis, treatment, orthoptic exercises) | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .6 | | Study, knowledge, and practical application. | Heterophoria (diagnosis, treatment, orthoptic exercises) | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .7 | | Study, knowledge, and practical application. | Concomitant squint | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .8 | | Study, knowledge, and practical application. | Concomitant squint | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .9 | | Study, knowledge, and practical application. | Esotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .10 | | Study, knowledge, and practical application. | Esotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .11 | | Study, knowledge, and practical application. | Non accommodative esotropia characters | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .12 | | Study, knowledge, | Non accommodative esotropia characters | Practical + Theoretical | Practical exams, theoretical exams, |

| | | | | | |
|-----|--|--|--|-------------------------|---|
| | | and practical application. | | | reports, and studies. |
| .13 | | Study, knowledge, and practical application. | Accommodative esotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .14 | | Study, knowledge, and practical application. | Accommodative esotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .15 | | Study, knowledge, and practical application. | Treatment of error of refraction and amblyopia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .16 | | Study, knowledge, and practical application. | Treatment of error of refraction and amblyopia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .17 | | Study, knowledge, and practical application. | Orthoptic treatment operation | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .18 | | Study, knowledge, and practical application. | Orthoptic treatment operation | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .19 | | Study, knowledge, and practical application. | Exotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .20 | | Study, knowledge, and practical application. | Exotropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .21 | | Study, knowledge, and practical application. | Hypertropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .22 | | Study, knowledge, and practical application. | Hypertropia | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .23 | | Study, knowledge, and practical application. | Convergence insufficient | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .24 | | Study, knowledge, and practical application. | Convergence insufficient | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .25 | | Study, | Diagnosis of convergence | Practical + | Practical exams, |

| | | | | | |
|-----|--|--|--|-------------------------|---|
| | | knowledge, and practical application. | insufficiency | Theoretical | theoretical exams, reports, and studies. |
| .26 | | Study, knowledge, and practical application. | Diagnosis of convergence insufficiency | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .27 | | Study, knowledge, and practical application. | Paralytic squint | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .28 | | Study, knowledge, and practical application. | Paralytic squint | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .29 | | Study, knowledge, and practical application. | Investigation of ocular muscle palsy | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |
| .30 | | Study, knowledge, and practical application. | Investigation of ocular muscle palsy | Practical + Theoretical | Practical exams, theoretical exams, reports, and studies. |

48.Course Assessment

Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams.

49. Learning and Teaching Resources

| | |
|--|---------------------------------|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Kaniski, clinical ophthalmology |
| Main References (Sources) | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| | |
|---|--|
| 50. Course Title | |
| X-rays and ultrasound. | |
| 51. Course Code | |
| XRE18400 | |
| 52. Academic Year / Type of Course | |
| 2025-2024 | |
| 53. Date of Description Preparation | |
| 2025-1-1 | |
| 54. Available Attendance Mode .13 | |
| In person | |
| 55.Total Credit Hours / Units | |
| 6 hours | |
| 56. Course Coordinator (If more than one, list all) | |
| Name: Dr. Sama Mahmood | |
| Email: samaaalbaghdadi@gmail.com | |
| 57. Course Objectives | |
| Course Objectives | The program aims to teach the student about X-rays and ultrasound, their types, and how to use them for diagnosis. |
| 1. Understanding the components and uses of the X-ray machine. | |
| 2. Understanding the devices required to diagnose eye diseases, tumors, and injuries affecting the eye. | |
| 3. Understanding the MRI (Magnetic Resonance Imaging) machine . | |
| 58. Teaching and Learning Strategies | |

| | |
|-----------------|---|
| Strategy | 1- Enabling the student to.. |
| | 1 Understanding the components and uses of the X-ray machine. |
| 2 | Understanding the equipment required for diagnosing eye diseases, tumors, and eye injuries. |
| | 3 Understanding the MRI (Magnetic Resonance Imaging) machine. |
| | 4 Understanding the CT (Computed Tomography) scanner. |
| | 5 Understanding the ultrasound machine. |
| | 59.Course Structure |

11. Course Structure

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Method of Learning | Assessment Method |
|------|-------|--|--|-------------------------|--|
| .31 | | Study, knowledge, and practical application. | Introduction to radiological | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .32 | | Study, knowledge, and practical application. | Standard orbital views | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .33 | | Study, knowledge, and practical application. | Standard orbital views | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .34 | | Study, knowledge, and practical application. | Radiological orbital anatomy | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .35 | | Study, knowledge, and practical application. | Radiographic changes seen with orbital pathology | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .36 | | Study, knowledge, and practical application. | Foreign body localization by plain x-ray film | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .37 | | Study, knowledge, and practical application. | Introduction to computed tomography of the orbit | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .38 | | Study, knowledge, and practical application. | Vascular lesions, inflammation and infections of the orbit by CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .39 | | Study, knowledge, and practical application. | Vascular lesions, inflammation and infections of the orbit by CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .40 | | Study, knowledge, and practical application. | Tumors of the optic nerve, orbital tumors (primary, secondary and metastasis) as seen by CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .41 | | Study, knowledge, and practical application. | Tumors of the optic nerve, orbital tumors (primary, secondary and metastasis) as seen by CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |

| | | | | | |
|-----|--|--|--|-------------------------|--|
| .42 | | Study, knowledge, and practical application. | Orbital trauma by CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .43 | | Study, knowledge, and practical application. | Introduction to MRI of the orbit | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .44 | | Study, knowledge, and practical application. | Physical principles of MRI | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .45 | | Study, knowledge, and practical application. | Physical principles of MRI | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .46 | | Study, knowledge, and practical application. | MRI systems (units, surface coils, site selection) | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .47 | | Study, knowledge, and practical application. | MRI systems (units, surface coils, site selection) | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .48 | | Study, knowledge, and practical application. | Clinical applications of MRI and orbital diseases | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .49 | | Study, knowledge, and practical application. | Clinical applications of MRI and orbital diseases | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .50 | | Study, knowledge, and practical application. | Trauma and tumors of the orbit as seen by MRI | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .51 | | Study, knowledge, and practical application. | Trauma and tumors of the orbit as seen by MRI | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .52 | | Study, knowledge, and practical application. | Intraocular tumors as seen by MRI | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .53 | | Study, knowledge, and practical application. | Advantages and disadvantages of MRI over CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .54 | | Study, knowledge, and practical application. | Advantages and disadvantages of MRI over CT-scan | Practical + Theoretical | Practical exams, theoretical exams, reports, and research |

| | | | | | |
|-----|--|--|--|-------------------------|--|
| | | | | | studies. |
| .55 | | Study, knowledge, and practical application. | Introduction to diagnostic orbital ultrasonography | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .56 | | Study, knowledge, and practical application. | Introduction to diagnostic orbital ultrasonography | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .57 | | Study, knowledge, and practical application. | A-scan and B-scan ultrasonography | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .58 | | Study, knowledge, and practical application. | A-scan and B-scan ultrasonography | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .59 | | Study, knowledge, and practical application. | Indications of orbital ultrasonography, clinical applications and biometry | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |
| .60 | | Study, knowledge, and practical application. | Indications of orbital ultrasonography, clinical applications and biometry | Practical + Theoretical | Practical exams, theoretical exams, reports, and research studies. |

| 60. Course Assessment | |
|---|---------------------------------|
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams. | |
| 61. Learning and Teaching Resources | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Kaniski, clinical ophthalmology |
| Main References (Sources) | Imaging technique |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| 62. Course Title6 | | | | | |
|---|-------|--|--------------------|--|---------------|
| Arabic Language | | | | | |
| 63. Course Code | | | | | |
| ARL18102 | | | | | |
| 64. Academic Year / Type of Course | | | | | |
| Second semester / First stage (or First year) | | | | | |
| 65. Date of Description Preparation | | | | | |
| 2025/3/20 | | | | | |
| 66. Available Attendance Mode | | | | | |
| | | | | | |
| 67. Total Credit Hours / Units | | | | | |
| 6 hours per week (2 theoretical and 4 practical) – Number of units: 4 | | | | | |
| 68. Course Coordinator (If more than one, list all) | | | | | |
| Name: Dr. Ahmed Rasool Noori Email: ahmed.noori76@yahoo.com | | | | | |
| 69. Course Objectives | | | | | |
| Course Objectives | | 1. Getting acquainted with the basics of the Arabic language 2. Introducing learners to common mistakes 3. Proper use of punctuation marks | | | |
| 70. Teaching and Learning Strategies | | | | | |
| Strategy | | Lectures are delivered in two parts: The first using PowerPoint presentations The second through explanation on the whiteboard • | | | |
| Course Structure .14 | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | طريقة التعلم | طريقة التقييم |
| 1 | 1/15 | Understanding the basics of the Arabic language Introducing learners to common mistakes Proper use of punctuation | Subjects 15 | Delivering lectures using PowerPoint presentations and explaining on the whiteboard. | |

| | | | | | |
|---|--|-------|---|--|--|
| | | marks | | | |
| 72. Course Assessment | | | | | |
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, monthly and written exams, reports, etc., Coursework (Saa'i): 30 marks, Final Exam: 70 marks | | | | | |
| 73. Learning and Teaching Resources .15 | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | Lectures and activities within the lessons. | | |
| Main References (Sources) | | | Grammar | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | Ibn Al-Razi Al-Ajurrumiyya | | |
| Electronic References and Internet Resources | | | Scientific research | | |

Course Description Template

| |
|---|
| 74.Course Title |
| Principles of Chemistry |
| 75. Course Code |
| CHM18101 |
| 76. Academic Year / Type of Course |
| First Semester / First Year – 2024/2025 |
| 77.Date of Description Preparation |

| 2025/5/21 | | | | | |
|---|-------|----------------------------|---|--|-------------------|
| 78.Available Attendance Mode | | | | | |
| In person | | | | | |
| 79. Total Credit Hours / Units | | | | | |
| 2 theoretical hours / 4 practical hours | | | | | |
| 80. Course Coordinator (If more than one, list all) | | | | | |
| Name: Asst. Prof. Faiza Hazem Hassan Email: dr.faizahazem@uruk.edu.iq | | | | | |
| 81. Course Objectives | | | | | |
| Course Objectives | | | 1. Understanding the basics of chemistry and chemical structures 2. Understanding biochemistry and the chemical components of the human body | | |
| 82. Teaching and Learning Strategies .16 | | | | | |
| | | | Strategy | Delivering lectures, using explanation and clarification methods along with discussion and dialogue, and conducting descriptive (narrative) assessments. | |
| 83. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Laboratory instruction, safety rules and equipment | | |
| 2 | | | Glassware laboratory Practice with balances and different type of apparatus (centrifuge, hotplate, water bath (and glassware | | |
| 3 | | | Prepare solution from solids and liquids (Volumetric analysis (titration Titration of hydrochloric acid with sodium hydroxide solution Determination of acetic acid in vinegar Titration of potassium permanganate .solution with sodium oxalate | | |

| | | | | | |
|----|--|--|--|--|--|
| 4 | | | Measuring and Recording Temperature Melting point and Boiling point Chemical and physical properties | | |
| 5 | | | Term 1 Exam | | |
| 6 | | | A scheme for the identification of the carbohydrates | | |
| 7 | | | Measuring the pH and buffer solution | | |
| 8 | | | Carbohydrates (monosaccharides) Molish test, Barfoed test, Benedict test, Iodine test, bile test and selivanoff's test | | |
| 9 | | | Hydrolysis of disaccharides and Hydrolysis of polysaccharides Qualitative Analysis of Proteins Biuret test, Xanthoproteic Test, Ninhydrin test, Molish test, and Sakaguchi test and Lead Sulfide test | | |
| 10 | | | .Precipitation of proteins Qualitative analysis of cholesterol (Salkowski test and Liebermann-burchard (test | | |
| 11 | | | Iodine test to distinguish between saturated and unsaturated compounds | | |
| 12 | | | Term 2 Exam | | |
| 13 | | | Final Exams | | |
| 14 | | | | | |
| 15 | | | | | |

| | |
|---|--|
| 84. Course Assessment | |
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams. | |
| 85. Learning and Teaching Resources | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | 1. Applied Biochemistry Textbook |
| Main References (Sources) | Fundamentals of Analytical chemistry by Skoog and West .8th.ed.(2013) Lippincott Biochemistry .2 6th Edition (2014) 4.Modern Analytical Chemistry- David |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) |)10(20.Harvey .1 |
| Electronic References and Internet Resources | |

Course Description Template

| | |
|---|--|
| 86. Course Title | |
| Anatomy | |
| 87. Course Codec | |
| AHN18101 | |
| 88. Academic Year / Type of Course | |
| 2025 - 2024 | |
| 89. Date of Description Preparation | |
| 2025- 2024 | |
| 90. Available Attendance Mode | |
| | |
| 91. Total Credit Hours / Units | |
| 2 theoretical hours and 5 practical hours | |
| 92. Course Coordinator (If more than one, list all) | |
| Name: Asst. Lecturer Ahmed Fadhil Shanan | |
| Email: ahmed.fadhil.1983.1983@gmail.com | |
| 93. Course Objectives | |
| Course Objectives | 1 The student should be familiar with the anatomical parts of the eye 2 Understand their locations and their venous and arterial blood supply 3 Understand the incoming and outgoing nerve signals related to them |
| 94. Teaching and Learning Strategies | |

| Strategy | | Delivering lectures using various presentation methods: PowerPoint, videos | | | |
|-----------------------|-------|--|--------------------|-----------------|-------------------|
| 95. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1st | | Introduction to anatomy | | | |
| 2 nd | | Anatomical terms | | | |
| 3 rd | | ,anatomical plains | | | |
| 4 th | | ,anatomical directions | | | |
| | | Types of studying anatomy , anatomical region | | | |
| 5 th | | -basic anatomic structures | | | |
| 6 th | | Types of tissue | | | |
| | | -cell | | | |
| 7 th | | -the bones and joints | | | |
| 8 th | | -skeletal system | | | |
| 9 th | | -appendicular skeleton | | | |
| 10 th | | -joints | | | |
| 11 th | | -skull | | | |
| 12 th | | Thoracic cage | | | |
| 13 th | | -vertebral column | | | |
| 14 th | | -circulatory system and blood supply | | | |
| 15 th | | -nervous system | | | |
| 16 th | | -central nervous system | | | |
| 17 th | | -anatomy of the eye | | | |
| 18 th | | -lacrimal apparatus | | | |
| 19 th | | -the orbit | | | |
| 20 th | | -muscles of the orbit | | | |
| 21th | | -nerves of the orbit | | | |
| 22th | | Layers of the eye | | | |
| 23th | | -funvtion of each layer of the eye | | | |
| 24 th | | -cornea | | | |
| 25 th | | -anterior chamber of the eye | | | |
| 26 th | | -the uveal tract | | | |
| | | -the ciliary body | | | |
| | | -lens | | | |
| | | -the retina | | | |
| | | -blood and nerv suppluy | | | |
| 27 th | | | | | |
| 96. Course Assessment | | | | | |

Grade Distribution out of 100:

First Semester: 20 marks (12 theoretical + 8 practical), **Second Semester:** 20 marks (12 theoretical + 8 practical), **Total Coursework (Saa'i):** First Semester Grade + Second Semester Grade, **Final Practical Exam:** 25 marks, **Final Theoretical Exam:** 35 marks

| 97. Learning and Teaching Resources | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | Lectures and activities within the lessons |
| Main References (Sources) | Snell textbook of anatomy |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | Medscape .uptodate |

Course Description Template

| | |
|---|--|
| 98. Course Title | |
| Medical and optical physics 2 | |
| 99. Course Code | |
| | |
| 100. Academic Year / Type of Course | |
| First Year / Second Semester 2024–2025 | |
| 101. Date of Description Preparation | |
| 2024–2–2 | |
| 102. Available Attendance Mode | |
| In Person | |
| 103. Total Credit Hours / Units | |
| Total: 8 hours – 3 theoretical – 5 practical – Number of units: 5 | |
| 104. Course Coordinator (If more than one, list all) | |
| Name: Assistant Lecturer Ibrahim Abdul Kareem | |
| Email: Ibrahim.ab.ali@uruk.edu.iq | |
| 105. Course Objectives | |
| Course Objectives | <ol style="list-style-type: none"> 1 By the end of the semester, the student should be able to understand visual phenomena in physics. 2 Understand the physical functioning of the eye. 3 Learn about the telescope device, its components, purpose, and applications. 4 Understand the refractive indices of lenses, mirrors, and parts of the eye. 5 Understand the concept of renewable energies through solar cell technology. |
| 106. Teaching and Learning Strategies | |
| Strategy | <p>Discussion and dialogue strategy</p> <p>Cooperative learning strategy Lecture strategy: delivered through various methods</p> |

| 107. Course Structure | | | | | |
|-----------------------|-------|----------------------------|--|-----------------|-------------------|
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Schematic and Reduced Eye (Gullstrand Schematic Eye, Listing reduced eye) | | |
| 2 | | | . Eye function (myopia, hypermetropia, astigmatism) | | |
| 3 | | | Telescope: definition, purposes, types, design, construction | | |
| 4 | | | Retinal image size and formation | | |
| 5 | | | Total internal reflection | | |
| 6 | | | Refractive index of: Lens, Mirrors, Eye structure | | |
| 7 | | | Coherent sources, single slit, double slit, effect on the eye | | |
| 8 | | | Solar energy technology, availability of solar radiation | | |
| 9 | | | Photovoltaic devices, dye-sensitized solar cells | | |
| 10 | | | Photo electrochemical cells for hydrogen production | | |
| 11 | | | Nanotechnology in Renewable Energy Systems | | |
| 12 | | | Energy Sector Products Using Nanomaterials | | |
| 13 | | | Nanotechnology for Hydrogen Production | | |
| 14 | | | Nanomaterials for CO ₂ Conversion | | |
| 15 | | | | | |

| | | | | | |
|--|--|--|---|--|--|
| | | | Nanomaterials and Direct Air Capture of CO ₂ | | |
| 108. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks (theoretical) + 15 marks (practical), Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 109. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | Lectures and activities within the course | | |
| Main References (Sources) | | | IOMP, Paperpile, Citationsy | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | Google scholar, chat gpt , deep seek | | |

Course Description Template

| | |
|--|---|
| 110. Course Title | |
| Laser in ophthalmology | |
| 111. Course Code | |
| 112. Academic Year / Type of Course | |
| Second Semester – Second Stage (Year) | |
| 113. Date of Description Preparation | |
| 2025-1-2 | |
| 114. Available Attendance Mode | |
| In person | |
| 115. Total Credit Hours / Units | |
| Total: 4 hours – 1 theoretical – 3 practical – Number of units: 2 | |
| 116. Course Coordinator (If .i more than one, list all) | |
| Name: Asst. Lecturer Ibrahim Abdul Kareem Email: Ibrahim.ab.ali@uruk.edu.iq | |
| 117. Course Objectives | |
| Course Objectives | 1 The student should be familiar with laser interaction with living cells for each type of laser. 2 Understand the types of lasers used in the treatment of eye diseases. 3 Understand the uses of lasers for each medical condition and know the properties of each. |
| 118. Teaching and Learning Strategies | |

| | | | | | |
|-----------------------|-------|---|---|-----------------|-------------------|
| Strategy | | 1 Lecture strategy: delivering content using various methods 2 Dialogue and discussion strategy 3 Cooperative learning strategy | | | |
| 119. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Lasers definition characteristics applications in eye | | |
| 2 | | | Laser in medicine Advantage disadvantage | | |
| 3 | | | Types of Laser in medicine | | |
| 4 | | | Excimer lasers (LASIK) Double frequency Nd/yag laser | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | Micro plus laser | | |
| 9 | | | Femtosecond laser | | |
| 10 | | | Laser Safety | | |
| 11 | | | Laser tissue interaction | | |
| 12 | | | Laser tissue interaction | | |
| 13 | | | | | |
| 14 | | | Laser in diagnostics (OCT) | | |
| 15 | | | Confocal scanning laser | | |
| | | | ophthalmoscopy (CSLO) | | |
| | | | Laser doppler flowmetry | | |
| | | | Photo Refractive keratectomy (PRK) | | |
| | | | Laser treatment for eyes (tissues and diseases) | | |
| | | | Retinal Laser treatment | | |

| | | | | | |
|---|--|--|----------|--|--|
| | | | Revision | | |
| 120. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks (theoretical) + 15 marks (practical), Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 121. Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | Lectures and activities included in the curriculum | | | |
| Main References (Sources) | | Step by step laser in ophthalmology Laser application , manual in ophthalmology | | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | Google scholar, chat gpt , deep seek | | | |

Course Description Template

| | |
|---|---|
| 122. Course Title | |
| Laser treatment of eye diseases | |
| 123. Course Code | |
| | |
| 124. Academic Year / Type of Course | |
| First Semester – Third Stage (Year) | |
| 125. Date of Description Preparation | |
| 2024-2-2 | |
| 126. Available Attendance Mode | |
| In person | |
| 127. Total Credit Hours / Units 127 | |
| Total: 3 hours – 1 theoretical – 2 practical – Number of units: 2 | |
| 128. Course Coordinator (If more than one, list all) | |
| Name: Asst. Lecturer Ibrahim Abdul Kareem | |
| Email: Ibrahim.ab.ali@uruk.edu.iq | |
| 129. Course Objectives | |
| Course Objectives | The student should be familiar with .2 the interaction of lasers with living cells for each type of laser. Understand the types of lasers used in .3 the treatment of eye diseases. Understand the applications of lasers .4 |

| | | for each medical condition and know the properties of each type. | | | |
|---------------------------------------|---|---|-------------------------------|-----------------|-------------------|
| 130. Teaching and Learning Strategies | | | | | |
| Strategy | 1 Lecture strategy: 2 presenting the material using diverse methods 3 Dialogue and discussion strategy 4.Cooperative learning strategy | | | | |
| 131. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | | | Laser in medicine • | | |
| 2 | | | Advantage • disadvantage | | |
| 3 | | | Laser in eye | | |
| 4 | | | treatment (diseases in | | |
| 5 | | | the eye, method of | | |
| 6 | | | .(the treatment | | |
| 7 | | | Laser effects on | | |
| 8 | | | biological | | |
| 9 | | | tissue,(thermal | | |
| 10 | | | effect), (chemical, | | |
| 11 | | | Mechanical effects). | | |
| 12 | | | Co2 Laser (wave | | |
| 13 | | | length = 10.6 nm). | | |
| 14 | | | Excimer Laser (wave | | |
| 15 | | | length (λ)) | | |
| | | | ND- YAG Laser | | |
| | | | (Define, λ =1064 nm). | | |
| | | | Properties of Diode | | |
| | | | Laser λ =810 nm to | | |
| | | | 110 nm. | | |
| | | | Side effects of Laser | | |
| | | | eye operation | | |
| | | | Laser treatment | | |

| | | | | | |
|--|--|--|---|--|--|
| | | | (Define retina with properties). | | |
| | | | Argon Laser ($\lambda_{\text{blue}} = 488 \text{ nm}$ and $\lambda_{\text{green}} = 514 \text{ nm}$). | | |
| | | | Revision | | |
| 132. Course Assessment | | | | | |
| Grade Distribution out of 100: Coursework: 25 marks (theoretical) + 15 marks (practical), Final Practical Exam: 25 marks, Final Theoretical Exam: 35 marks | | | | | |
| 133. Learning and Teaching Resources | | | | | |
| Required Textbooks (Prescribed curriculum, if available) | | Lectures and activities included in the course | | | |
| Main References (Sources) | | Step by step laser in ophthalmology Laser application , manual in ophthalmology | | | |
| Recommended Supplementary Books and References (Scientific journals, reports, etc.) | | | | | |
| Electronic References and Internet Resources | | Google scholar, chat gpt , deep seek | | | |

Course Description Template

| |
|---|
| 134. Course Title |
| Medical Terminology (Three Sections: Optics, Cosmetics and Laser, Therapeutic Nutrition |
| 135. Course Code 1 |
| |
| 136. mic Year / Type of Course Academic |
| First semester: Department of Nutrition and Optics Second semester: Department of Cosmetics and Laser First: Department of Nutrition and Optics20Academic Year: 2024–2025 Second semester: Department of Cosmetics and Laser Academic Year: 2024–2025 |
| 137. Date of Description Preparation |
| 2025\5\12 |
| 138. Available Attendance Mode |
| In person |
| 139. Total Credit Hours / Units |
| 32 hours for each section / 2 units for each section |
| 140. Course Coordinator (If more than one, list all) |
| Name: Asst. Lecturer Sara Hashem Zghair Email: sara.h.zghair@uruk.edu.iq |
| 141. Course Objectives |

| | | | | | |
|---------------------------------------|-------|---|--|-------------------------|----------------------------|
| Course Objectives | | 1 General Objective: The student will become familiar with general and medical terminology. 2 Specific Objective: To learn medical terms, especially those used by the student during the academic stage and related to their specialization | | | |
| 142. Teaching and learning Strategies | | | | | |
| Strategy | | 1. Teaching the curriculum theoretically by presenting the material to students while encouraging their active participation. 2. Engaging students in applying the material. ☐ 3. Conducting implicit (formative) assessments during the lecture. ☐ 3.Administering a test on the material in the lecture following its explanation, to reinforce and solidify the content, and to assess the effectiveness of the material for students | | | |
| 143. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | 222 | | Introduction- structural analysis- basic rules of medical word building | Theoretical explanation | Discussion and examination |
| 2 | 2 | | Major suffixes: (1) suffixes denoting a state or condition | | |
| 3 | 2 | | Major suffixes: (1) suffixes denoting a state or condition | | Discussion and examination |
| 4 | | | Major suffixes: (2) suffixes denoting medical actions | | Discussion and examination |
| 5 | | | Prefixes: (4) Prefixes of size, time, place, roots, and word terminals. | | Discussion and examination |
| 6 | | | Terms concerning the body as a whole Terms concerning oncology | | Discussion and examination |
| 7 | | | Terms concerning the skin and its appendages Terms concerning the gastrointestinal tract | | Discussion and examination |
| 8 | | | Terms concerning the respiratory system and cardiovascular system Terms concerning the endocrine system | | Discussion and examination |

| | | | | | |
|----|--|--|---|--|----------------------------|
| 9 | | | Terms concerning the blood and lymphatic system | | Discussion and examination |
| 10 | | | Terms concerning the musculoskeletal system & nervous system Terms concerning the special senses | | Discussion and examination |
| 11 | | | Introduction- structural analysis- basic rules of medical word building | | Discussion and examination |
| 12 | | | | | |
| 13 | | | | | Discussion and examination |
| 14 | | | | | Discussion and examination |
| 15 | | | | | Discussion and examination |

144. Course Assessment

Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams.

145. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | |
| Main References (Sources) | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| |
|--|
| 146. Course Title |
| Drugs |
| 147. Course Code |
| |
| 148. Academic Year / Type of Course |
| "Second Semester, Optics Department (2024–2025)" |

| 149. Date of Description Preparation | | | | | |
|--|--|----------------------------|---|---------------------|--|
| 2025\5\12 | | | | | |
| 150. Available Attendance Mode | | | | | |
| In Person Attendance | | | | | |
| 151. Total Credit Hours / Units | | | | | |
| 32 divided by 4 units | | | | | |
| :Course Coordinator (If more than one, list all) | | | | | |
| Name: Assistant Lecturer Sara Hashem Zghair | | | | | |
| Email: sara.h.zghair@uruk.edu.iq | | | | | |
| 153. Course Objectives | | | | | |
| Course Objectives | General Objective: The student will become familiar with pharmacology and toxicology. specific effects of toxins on the eye Specific Objective: The student will learn about the uses of medications related to eye diseases and the | | | | |
| 154. Teaching and Learning Strategies | | | | | |
| Strategy | Teaching Methodology: 1. The curriculum is delivered theoretically by presenting the material to students while encouraging their participation. 2. Students are engaged in applying the material practically. 3. Implicit (formative) assessments are conducted during the lecture. 4. A follow-up test on the material is conducted in the lecture following the explanation, to reinforce and confirm the content as well as to evaluate the effectiveness of the material for the students. | | | | |
| 155. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | 4 | | Principles of Drug Therapy | Theoretical Lecture | Discussion and Exam |
| | 2 | | | | Discussion and Exam |
| 2 | 2 | | Drugs Affecting the Autonomic Nervous System – I | | Discussion and Exam |
| 3 | | | Drugs Affecting the Autonomic Nervous System – II | | Discussion and Exam Discussion and Exam |
| 4 | | | Drugs Affecting the Central Nervous System | | Discussion and Exam |
| 5 | | | Drugs Affecting the | | Discussion and Exam Discussion and Exam |

| | | | | | |
|----|--|--|---|--|---------------------|
| 6 | | | Cardiovascular System – I | | |
| | | | Drugs Affecting the Cardiovascular System – II | | Discussion and Exam |
| 7 | | | Drugs Affecting the Endocrine System | | Discussion and Exam |
| | | | Chemotherapeutic Drugs – I | | |
| 8 | | | Chemotherapeutic Drugs – II | | Discussion and Exam |
| | | | | | Discussion and Exam |
| 9 | | | Anti-inflammatory, Antipyretic, and Analgesic Agents I | | Discussion and Exam |
| | | | Anti-inflammatory, Antipyretic, and Analgesic Agents II | | Discussion and Exam |
| 10 | | | | | Discussion and Exam |
| | | | Gastrointestinal and Antiemetic Drugs I | | |
| | | | Gastrointestinal and Antiemetic Drugs II | | Discussion and Exam |
| 11 | | | | | Discussion and Exam |
| 12 | | | Drugs for Disorders of the Respiratory System | | Discussion and Exam |
| 13 | | | Drugs of Abuse | | |
| 14 | | | Principles of Drug Therapy | | |
| 15 | | | | | |

156. Course Assessment

Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams.

| 157. Learning and Teaching Resources | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | |
| Main References (Sources) | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources | |

Course Description Template

| 1.Course Title | | | | | |
|--|-----------|---|--------------------|-------------------------|----------------------------|
| Professional Ethics – Department of Optics | | | | | |
| 2.Course Code | | | | | |
| | | | | | |
| 3. Academic Year / Type of Course | | | | | |
| First and Second Semesters, 2024–2025 | | | | | |
| 4. Date of Description Preparation | | | | | |
| 2025\5\12 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In Person in the class | | | | | |
| 6. Total Credit Hours / Units6 | | | | | |
| 32 / 2 Units | | | | | |
| 7. Course Coordinator (If more than one, list all) | | | | | |
| Name: Asst. Lecturer Sara Hashim Zghair | | | | | |
| Email: sara.h.zghair@uruk.edu.iq | | | | | |
| 8.Course Objectives | | | | | |
| Course Objectives | | | | | |
| 9. Teaching and Learning Strategies | | | | | |
| :Strategy | | 1. Teaching the curriculum theoretically by presenting the material to students while encouraging their active participation. 2 Engaging students in applying the course content. 3 Conducting implicit assessments during the lecture. 4 Administering assessments in the lecture following the content delivery to reinforce and solidify the material, as well as to evaluate its effectiveness for students. | | | |
| 10. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1 | 22 222 | | | Theoretical Explanation | Discussion and Examination |
| | 2 | | | | Discussion and |

| | | | | | |
|----|--|--|--|--|----------------------------|
| 2 | | | | | Examination |
| 3 | | | | | Discussion and Examination |
| 4 | | | | | Discussion and Examination |
| 5 | | | | | Discussion and Examination |
| 6 | | | | | Discussion and Examination |
| 7 | | | | | Discussion and Examination |
| 8 | | | | | Discussion and Examination |
| 9 | | | | | Discussion and Examination |
| 10 | | | | | Discussion and Examination |
| 11 | | | | | Discussion and Examination |
| 12 | | | | | Discussion and Examination |

| | | | | | |
|---|--|--|--|--|----------------------------|
| 13 | | | | | Discussion and Examination |
| 14 | | | | | Discussion and Examination |
| 15 | | | | | |
| Course Assessment .1 | | | | | |
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams. | | | | | |
| 3. Learning and Teaching Resources .2 | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | | | |
| Main References (Sources) | | | | | |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| | |
|---|--|
| Course Title | |
| Computer Application | |
| Course Code | |
| | |
| Academic Year / Type of Course | |
| First Semester / Second Year / 2023–2024 | |
| Date of Description Preparation | |
| 18/4/2025 | |
| Available Attendance Mode | |
| In person | |
| Total Credit Hours / Units | |
| 30 Practical / 15 Theoretical / 2 Units | |
| Course Coordinator (If more than one, list all) | |
| Name: Asst. Lecturer Mumin Ibrahim Jameel | |
| Email: mumin.i.jameel@uruk.edu.iq | |
| | |
| Course Objectives | |
| Course Objectives | <ul style="list-style-type: none"> To understand the fundamentals and components of computers and their types. To become familiar with the concept of the Internet and its applications (e-mail, web |

| | |
|--|---|
| | <p>browsers).</p> <ul style="list-style-type: none"> · To equip students with the skills to create, edit, and print presentations. · To use spreadsheets and perform mathematical operations. |
|--|---|

Teaching and Learning Strategies

| | |
|----------|---|
| Strategy | <ul style="list-style-type: none"> □ Theoretical instruction through presenting the material to students and encouraging student participation. □ Practical instruction using computers. □ Engaging students in hands-on application of the material on the computer. □ Conducting implicit (formative) assessments during lectures. □ Administering follow-up assessments in the lecture following the explanation of the material to reinforce understanding and evaluate the effectiveness of the content for students. |
|----------|---|

Course Structure

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
|------|-------|---|---|---------------------------------------|----------------------------|
| 1 | 3 | Introduction to Computer | Concepts of Hardware and Software with their components; Concept of Computing, | Theoretical and Practical Explanation | Discussion and Examination |
| 2 | 3 | Computer Components | Computer Portions Hardware Parts, IO Units, Memory Types | Theoretical and Practical Explanation | Discussion and Examination |
| 3 | 3 | Computer Components | Basic CPU Components, Computer Ports, | Theoretical Explanation | Discussion and Examination |
| 4 | 3 | Operating System and Graphical User Interface | Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques | Theoretical and Practical Explanation | Discussion and Examination |
| 5 | 3 | Operating System and Graphical User Interface | Use of Common Icons, Status Bar, Using Menu and Menu-selection, Concept of Folders | Theoretical and Practical Explanation | Discussion and Examination |
| 6 | 3 | Word Processing | Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents, Text creation and Manipulation | Theoretical Explanation | Discussion and Examination |

| | | | | | |
|----|---|---|--|---------------------------------------|----------------------------|
| 7 | 3 | | Formatting Text and Paragraphs, Using Templates for Document Creation | Theoretical and Practical Explanation | Discussion and Examination |
| 8 | 3 | Word Processing (Cont.) | Creating and Managing Tables, Utilizing Styles and Themes, Spell Check and Grammar Tools, Using Headers and Footer | Theoretical and Practical Explanation | Discussion and Examination |
| 9 | 3 | Spread Sheet | Introduction to Spreadsheet Software, Creating and Formatting Worksheets Sorting and Filtering Data, Using Formulas and Functions | Theoretical Explanation | Discussion and Examination |
| 10 | 3 | Spread Sheet (Cont.) | Using Formulas and Functions, Using Pivot Tables for Data Analysis Data Validation and Error Checking, Data Visualization Creating Charts and Graphs | Theoretical Explanation | Discussion and Examination |
| 11 | 3 | Presentation Software | Introduction to Presentation Software, Overview of Popular Presentation Tools creating a New Presentation, Using Templates and Themes, Inserting and Formatting Text and Images Transition and Animation Effects | Theoretical Explanation | Discussion and Examination |
| 12 | 3 | Presentation Software (Cont.) | Using Speaker Notes and Timers, , Advanced Features: Hyperlinks and Action Buttons, Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology | Theoretical Explanation | Discussion and Examination |
| 13 | 3 | Introduction to Internet and Web Browsers | Computer networks Basic; LAN, WAN,; Concept of | | |

| | | | | | |
|----|---|------------------------------|--|--|--|
| 14 | | to Internet and Web Browsers | Internet and its Applications; connecting to internet | | |
| 15 | 3 | Email | World Wide Web; Web Browsing software's | | |
| | 3 | Introduction to Cloud | Search Engines: Understanding UR. Domain name; IP Address Basics of electronic mail; Getting an email account; Sending and receiving | | |
| | | | Computing and Services Definition of Cloud Computing and its concept Cloud-Based Office Suites Office 365 and Google MWorkspace), Google Docs, Google Sheets, Google Drive Google Meet | | |

Course Assessment

Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, and monthly exams

2. Learning and Teaching Resources

| | |
|--|--|
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | |
| Main References (Sources) | <p>Graham Brown, David Watson, "Cambridge IGCSE Information and Communication (2020) Technology", 3rd Edition</p> <p>Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete 16th Edition (2020).</p> |
| Recommended Supplementary Books and References (<i>Scientific journals, reports, etc.</i>) | |
| Electronic References and Internet | https://learn.microsoft.com/en-us/training/modules/create- |

Course Description Template

Course Title

Computer Applications

:Course Code

:Academic Year / Type of Course

First Semester / First Stage / Academic Year 2024–2025

:Date of Description Preparation

18/4/2025

:Available Attendance Mode

In Person

:Total Credit Hours / Units

30 Practical Hours / 15 Theoretical Hours / 2 Credit Units

:Course Coordinator (If more than one, list all)

Name: Asst. Lecturer Mo'men Ibrahim Jameel

Email: mumini.jameel@uruk.edu.iq

Course Objectives

Course Objectives

- 1 To introduce students to the fundamentals and components of computers, as well as their types.
- 2 To provide a comprehensive understanding of the Internet and its applications (e.g., email, web browsers).
- 3 To equip students with the skills to create, edit, and print presentation slides.
- 4 To enable students to use spreadsheets and perform basic calculations

Teaching and Learning Strategies

Strategy

Theoretical instruction is delivered by presenting the material to students while encouraging active participation.

Practical instruction involves hands-on training using computers. Students are required to **apply the material practically** on the computer.

Formative assessments are conducted during lectures.

Follow-up assessments are administered in the lecture following the theoretical explanation to reinforce learning and evaluate the effectiveness of the material.

Course Structure

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
|--------|-------|----------------------------|--|---------------------------------------|----------------------------|
| First | 3 | Introduction to Computer | Concepts of Hardware and Software with their components; Concept of Computing, | Theoretical and Practical Explanation | Discussion and Examination |
| Second | 3 | Computer | Computer Portions | Theoretical and | Discussion and |

| | | | | | |
|-----------------|---|---|---|---------------------------------------|----------------------------|
| Third | | Components | Hardware Parts, 10 .Units, Memory Types | Practical Explanation | Examination |
| Fourth | 3 | Computer Components (Cont.) | Basic CPU Components, Computer Ports, | Theoretical Explanation | Discussion and Examination |
| Fifth | 3 | perating System and Graphical User Interface | Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques | Theoretical and Practical Explanation | Discussion and Examination |
| Sixth | 3 | Operating System and Graphical User Interface | Use of Common Icons, Status Bar, Using Menu and Menu-selection, Concept of Folders | Theoretical and Practical Explanation | Discussion and Examination |
| Seventh | 3 | Word Processing | Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents, Text creation and Manipulation | Theoretical Explanation | Discussion and Examination |
| Eighth | 3 | Word Processing (Cont.) | Formatting Text and Paragraphs, Using Templates for Document Creation | Theoretical and Practical Explanation | Discussion and Examination |
| Ninth | 3 | Spread Sheet | Creating and Managing Tables, Utilizing Styles and Themes, Spell Check and Grammar Tools, Using Headers and Footer | Theoretical and Practical Explanation | Discussion and Examination |
| Tenth | 3 | Spread Sheet (Cont.) | Introduction to Spreadsheet Software, Creating and Formatting Worksheets | Theoretical Explanation | Discussion and Examination |
| Eleventh | | | Sorting and Filtering Data, Using Formulas and Functions | | |

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|-------------------|---|---|--|-------------------------|----------------------------|
| Twelfth | 3 | Presentation Software | Using Formulas and Functions, Using Pivot Tables for Data Analysis Data Validation and Error Checking, Data Visualization Creating Charts and Graphs | Theoretical Explanation | Discussion and Examination |
| Thirteenth | 3 | Presentation Software (Cont.) | Introduction to Presentation Software, Overview of Popular Presentation Tools creating a New Presentation, Using Templates and Themes, Inserting and Formatting Text and Images Transition and Animation Effects | Theoretical Explanation | Discussion and Examination |
| Fourteenth | 3 | Introduction to Internet and Web Browsers | Using Speaker Notes and Timers, , Advanced Features: Hyperlinks and Action Buttons, Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology | Theoretical Explanation | Discussion and Examination |
| Fifteenth | 3 | Email | Computer networks Basic; LAN, WAN,; Concept of Internet and its Applications; connecting to internet | Theoretical Explanation | Discussion and Examination |
| | 3 | Introduction to Cloud | World Wide Web; Web Browsing software's Search Engines: Understanding UR. Domain name; IP Address | | |

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|--|--|--|---|--|--|
| | | | <p>Basics of electronic mail; Getting an email account; Sending and .receiving</p> <p>:Computing and Services</p> <p>Definition of Cloud Computing and its .concept</p> <p>Cloud-Based Office Suites</p> <p>Office 365 and Google MWorkspace), Google Docs, Google Sheets, Google Drive Google Meet</p> | | |
|--|--|--|---|--|--|

Course Assessment

Grade Distribution (out of 100):
Based on assigned student tasks such as daily preparation, regular quizzes (written and oral), monthly and written exams, reports, and other activities.

| | |
|--|--|
| Learning and Teaching Resources | <p>Graham Brown, David Watson, "Cambridge IGCSE Information and (2020) Communication, Technology", 3rd Edition</p> <p>Alan Evans, Kendall Martin, Mary A nne Poatsy, "Technology In .2 A ction Complete 16th Edition (2020).</p> |
| Recommended Supplementary Books and References (<i>e.g., scientific journals, reports, etc.</i>) | |
| Electronic References and Internet Resources (<i>relevant websites, online databases, and digital learning platforms</i>) | https://learn.microsoft.com/en-us/training/modules/create-presentations-powerpoint |

:Course Code

Academic Year / Type of Course

Second Semester / Third Stage / Academic Year 2024–2025

Date of Description Preparation

2/5/2025

Available Attendance Mode

In-Person Lectures

Total Credit Hours / Units

2 Theoretical Hours / 2 Credit Units

Course Coordinator (If more than one, list all)

Name: Asst. Lecturer Ruqayya Luay Mohammed Shamsuddin**Email:** Ruqyh.oglu@gmail.com

Course Objectives

Course Objectives

Specific Objectives:

1. To enable the student to identify the various types of studies, understand how they are conducted, recognize their objectives, and address potential obstacles in each type.
2. To familiarize the student with different research models and how to perform statistical analysis.

Teaching and Learning Strategies

Strategy

Theoretical instruction is delivered by presenting the material to students while encouraging active participation.

Students are required to **apply the material** by designing a scientific research project.

Formative assessments are conducted during the lecture.

Follow-up assessments are administered in the lecture following the explanation to reinforce the material and evaluate students' understanding and the effectiveness of the content.

Course Structure

| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
|------|-------|--|--------------------|-------------------------|-----------------------------------|
| 1 | 2 | Research; definitions, characteristics, and types. | Research Methods | Theoretical Explanation | Discussion and Examination |
| 2 | 2 | Principles of research | | Theoretical Explanation | Discussion |

| | | | | | |
|----|---|--|--|-------------------------|-----------------------------------|
| 3 | 2 | Scientific Methods. | | Explanation | |
| 4 | 2 | Materials and Methods. | | Theoretical Explanation | Discussion and Examination |
| 5 | 2 | Methods of Data Collection | | Theoretical Explanation | Discussion and Examination |
| 6 | 2 | Analytic studies. | | Theoretical Explanation | Discussion and Examination |
| 7 | 2 | Variables | | Theoretical Explanation | Discussion and Examination |
| 8 | 2 | Classification of research. | | Theoretical Explanation | Discussion and Examination |
| 9 | 2 | Intervention studies(experimental). | | Theoretical Explanation | Discussion and Examination |
| 10 | 2 | Pilot study | | Theoretical Explanation | Discussion and Examination |
| 11 | 2 | Cohort study | | Theoretical Explanation | Discussion and Examination |
| 12 | 2 | Introduction and literature review | | Theoretical Explanation | Discussion and Examination |
| 13 | 2 | Literature review in research project. | | Theoretical Explanation | Discussion and Examination |
| 14 | 2 | Research proposal protocol. | | Theoretical Explanation | Discussion and Examination |
| 15 | 2 | Research Problem Formation. | | Theoretical Explanation | Discussion and Examination |

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|---|--|--|---|--|----------------------------|
| | | | | | Discussion and Examination |
| | | | | | Discussion and Examination |
| | | | | | Discussion and Examination |
| | | | | | Discussion and Examination |
| | | | | | Discussion and Examination |
| Course Assessment | | | | | |
| <p>Grade Distribution (out of 100):</p> <p>Based on student-assigned tasks such as daily preparation, quizzes (written and oral), monthly and written exams, reports, and other related activities.</p> | | | | | |
| Learning and Teaching Resources | | | | | |
| Required Textbooks (<i>Prescribed curriculum, if available</i>) | | | | | |
| Main References | | | https://www.slideshare.net/collinsbrobbey/sample-study http://www.socscidiss.bham.ac.uk/methodologies.html | | |
| Recommended Supplementary Books and References (<i>e.g., scientific journals, reports, etc.</i>) | | | | | |
| Electronic References and Internet Resources | | | | | |

Course Description Template

| | | | | | |
|--|-------|---|---|-----------------|-------------------|
| 1. Course Title | | | | | |
| Optical Devices 3 | | | | | |
| 2. Course Code | | | | | |
| | | | | | |
| 3. Academic Year / Type of Course | | | | | |
| 2025-2024 | | | | | |
| 4.0 Date of Description Preparation | | | | | |
| 2025/10/10 | | | | | |
| 5.0 Available Attendance Mode | | | | | |
| In Person | | | | | |
| 6.0 Total Credit Hours / Units | | | | | |
| 30/120 | | | | | |
| 7.0 Course Coordinator (If more than one, list all . | | | | | |
| Name: Muhaymin Sameer Aref | | | | | |
| Email: mohaymin.s.arif@uruk.edu.iq | | | | | |
| 8.0 Course Objectives | | | | | |
| Course Objectives | | <p>General Objective:</p> <p>To ensure the student is knowledgeable about all optical devices and their uses.</p> <p>Specific Objective:</p> <p>To enable the student to operate the devices and understand how to maintain them.</p> | | | |
| 9.0 Teaching and Learning Strategies | | | | | |
| Strategy | | <p>1 Direct Guidance and Follow-up</p> <p>2 Creating Positive Role Models Among Students</p> <p>3 Theoretical Exams</p> <p>4 Assignments</p> <p>5 Practical Work</p> | | | |
| 10. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 1. Course Assessment | | | | | |
| <p>Grade Distribution (out of 100):</p> <p>Based on tasks assigned to the student, such as daily preparation, regular quizzes (oral and written), monthly and written exams, reports, and other related activities.</p> | | | | | |
| 1. Learning and Teaching Resources | | | | | |
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | | | Text book of visual science and clinical optometry By Bikas Bhattacharyya | | |
| Electronic References and Internet Resources (relevant websites, online databases, and digital learning platforms) | | | Clinical pearls for optometry By Roger F. Filips | | |
| Learning and Teaching Resources | | | Optometry magazines of American | | |

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| | ophthalmology and optometry academy |
| Recommended Supplementary Books and References (e.g., scientific journals, reports, etc.) | |

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|--|-------------|--|----------------------------------|---|-----|
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Colour vision test: Ishihara, hardy - Rand-Ritter. | الدراسة والمعرفة والتطبيق العملي | 4 | .1 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Colour vision test: city university, farn sworth-munsell 100 hve- | الدراسة والمعرفة والتطبيق العملي | 4 | .2 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Contract sensitivity, The Peli-roboson contrast sensitivity letter | الدراسة والمعرفة والتطبيق العملي | 4 | .3 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Amsler grid . | الدراسة والمعرفة والتطبيق العملي | 4 | .4 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Dark daptometry: definition, indication, Gold Mann-weeks daptometry. | الدراسة والمعرفة والتطبيق العملي | 4 | .5 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Dark adaptometry: sensitivity curve, cone branch, rod break, rod branch branch | الدراسة والمعرفة والتطبيق العملي | 4 | .6 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Orthoptic examination instruments, haloscope, home devices. | الدراسة والمعرفة والتطبيق العملي | 4 | .7 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Bagolini striated glasses. | الدراسة والمعرفة والتطبيق العملي | 4 | .8 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Synaptophore | الدراسة والمعرفة والتطبيق العملي | 4 | .9 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Synaptophore | الدراسة والمعرفة والتطبيق العملي | 4 | .10 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Maddox wing , Maddox rod | الدراسة والمعرفة والتطبيق العملي | 4 | .11 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Exophthalmo meter | الدراسة والمعرفة والتطبيق العملي | 4 | .12 |

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|--|-------------|-------------|----------------------------------|---|-----|
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | V.E.P | الدراسة والمعرفة والتطبيق العملي | 4 | .26 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | YAG Laser | الدراسة والمعرفة والتطبيق العملي | 4 | .27 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Argo Laser | الدراسة والمعرفة والتطبيق العملي | 4 | .28 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Gonios cope | الدراسة والمعرفة والتطبيق العملي | 4 | .29 |
| الاختبارات العملية والاختبارات النظرية والتقارير والدراسات | عملي + نظري | Revision | الدراسة والمعرفة والتطبيق العملي | 4 | .30 |

Course Description Template

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|-------------------------|
| 1.Course Title |
| Prescription Eyeglasses |

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|---|--------------|-----------------------------------|--|------------------------|--------------------------|
| 2. Course Code2 | | | | | |
| 3. Academic Year / Type of Course | | | | | |
| 2025-2024 | | | | | |
| 4. Date of Description Preparation | | | | | |
| 2025/10/10 | | | | | |
| 5. Available Attendance Mode | | | | | |
| In Person | | | | | |
| 6. Total Credit Hours / Units | | | | | |
| hrs. /8units 180 | | | | | |
| 7. Course Coordinator (If more than one, list all) | | | | | |
| Name: Muhaymin Sameer Aref Email: mohaymin.s.arif@uruk.edu.iq | | | | | |
| 1. Course Objectives | | | | | |
| General Objective: To understand how to dispense prescription eyeglasses, their methods of use, maintenance procedures, and assembly. Specific Objective: To learn how to examine vision and write eyeglass prescriptions, identify all types of eyeglasses, understand their function, usage techniques, and maintenance methods. | | | | | Course Objectives |
| 1. Teaching and Learning Strategies | | | | | |
| Lectures and discussions Brainstorming strategy Community work strategy Strategy for dialogue and exchange of opinions | | | | | Strategy |
| 1. Course Structure | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| Course Assessment .1 | | | | | |
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, monthly and written exams, reports, and so on. | | | | | |
| 2. Learning and Teaching Resources | | | | | |
| Required Textbooks (Prescribed Curriculum, if available): Official textbooks approved as part of the course syllabus. | | | Lectures of the Technical College of Health and Medical Technologies | | |
| Main References (Primary Sources): Key academic books and publications that form the core of the subject. | | | The eye book a complete guide to eye disorders and health | | |
| Recommended Supplementary Books and | | | Optometry magazines of American | | |

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| References (Scientific Journals, Reports, etc.): Additional resources that support and enrich the curriculum, including recent journals, research papers, and professional reports. | ophthalmology and optometry academy |
| Electronic References and Websites: Trusted online platforms, digital libraries, and educational websites relevant to the course content. | |

| Week | Hours | Required Learning Outcomes | Unit or subject name | Learning method | Evaluation method |
|------|-------|-----------------------------------|---|-----------------|-------------------------------|
| 1 | 6 | The student understands the topic | Spectacle, parts of spectacle (Double bridge). | theoretical | General questions and discuss |
| 2 | 6 | The student identifies the topic | Spectacles frames & measurements for all types of Spectacles (Reading and Folding size). | theoretical | general questions and discuss |
| 3 | 6 | The student understands the topic | Spectacles frames & measurements for all types of Spectacles (Reading and Folding | theoretical | general questions And discuss |

| | | | | | |
|----|---|----------------------------------|--|-------------|----------------------------------|
| 4 | 6 | The student identifies the topic | Measurements of Sports Spectacle. | Theoretical | general questions And discuss |
| 5 | 6 | The student identifies the topic | Frames Bridge Types. | theoretical | general questions And discuss |
| 6 | 6 | The student identifies the topic | Sun glasses (Tint and Gradient). | theoretical | general questions And discuss |
| 7 | 6 | The student identifies the topic | Protect the eye farm Harm | theoretical | general questions And discuss |
| 8 | 6 | The student identifies the topic | Gold Filled Glasses. | theoretical | general questions And discuss |
| 9 | 6 | The student identifies the topic | Drive safe glasses. | theoretical | general questions And discuss |
| 10 | 6 | The student identifies the topic | What is image jump (J) in bifocals? | theoretical | general questions And discuss |
| 11 | 6 | The student identifies the topic | Progressive lenses (3 in 1). | theoretical | general questions And discuss |
| 12 | 6 | The student identifies the topic | Binocular glasses. | theoretical | general questions And discuss |
| 13 | 6 | The student identifies the topic | How to Adjust Eye Glasses; | theoretical | general questions And discuss |
| 14 | 6 | The student identifies the topic | Removing Scratched Lens Coatings (MC). | theoretical | general questions And discuss |
| 15 | 6 | The student identifies the topic | Knife lens (Advantages). | theoretical | general questions And discuss |
| 16 | 6 | The student identifies the topic | Prism Lens, Calculation and manufacturing prism lens (Stage of making prism lens). | theoretical | general questions And discuss |
| 17 | 6 | The student identifies the topic | Prism Lens, Calculation and manufacturing prism lens (Stage of making prism lens). | theoretical | general questions And discuss |
| 18 | 6 | The student identifies the topic | Calculate Minimums Blank Size (MBS) + bevel. | theoretical | general questions And discuss |
| 19 | 6 | The student identifies the topic | Calculate Minimums Blank Size (MBS) + bevel. | theoretical | general questions And discuss |
| 20 | 6 | The student identifies the topic | BVD (compensated). | theoretical | general questions And discuss |

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|----|---|----------------------------------|--|-------------|----------------------------------|
| 23 | 6 | The student identifies the topic | Maintenance for Contact lens: | theoretical | general questions And discuss |
| 24 | 6 | The student identifies the topic | . Principles of test with measurement of contact lens. | theoretical | general questions And discuss |
| 25 | 6 | The student identifies the topic | Fitting of contact lens. | theoretical | general questions And discuss |
| 26 | 6 | The student identifies the topic | Care, Risk and Complication of contact lens. | theoretical | general questions And discuss |
| 27 | 6 | The student identifies the topic | Care, Risk and Complication of contact lens. | theoretical | general questions And discuss |
| 28 | 6 | The student identifies the topic | Soft Contact Lenses (HEMA): | theoretical | general questions And discuss |
| 29 | 6 | The student identifies the topic | Prescription of hard contact lenses and spectacles. | theoretical | general questions And discuss |
| 30 | 6 | The student identifies the topic | Review. | theoretical | general questions And discuss |

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|---|--------------|---|---|------------------------|--------------------------|
| 1. Course Title .1 | | | | | |
| Ocular prosthesis | | | | | |
| 2. Course Code .2 | | | | | |
| 3. Academic Year / Type of Course .3 | | | | | |
| 2024-2025 | | | | | |
| 4.Date of Description Preparation .4 | | | | | |
| 10/10/2025 | | | | | |
| 5. Available Attendance Mode .5 | | | | | |
| In Person | | | | | |
| 6. Total Credit Hours / Units6 .6 | | | | | |
| 180 hour /8units | | | | | |
| 7. Course Coordinator (If more than one, list all) .7 | | | | | |
| Name: Ayham Ali Email: [Please provide the email address to complete this entry.] : | | | | | |
| Course Objectives .8 | | | | | |
| Course Objectives | | General Objective: To develop cognitive understanding of ocular prosthetics (ocular alternatives) and describe the fundamentals of most examinations and devices used in ocular prosthetic clinics. Specific Objective: To enable the student to work in ocular prosthetic units and participate in the manufacturing of ocular prosthetics. | | | |
| Teaching and Learning Strategies .9 | | | | | |
| Strategy | | Lectures and discussions. Brainstorming strategy Community work strategy Strategy for dialogue and exchange of opinions | | | |
| Course Structure .10 | | | | | |
| Week | Hours | Intended Learning Outcomes | Unit / Topic Title | Learning Method | Assessment Method |
| 11. Course Assessment .11 | | | | | |
| Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, daily exams, oral exams, monthly and written exams, reports, and so on. | | | | | |
| 12. Learning and Teaching Resources .12 | | | | | |
| Required Textbooks (Prescribed curriculum, if available) | | | محاضرات الكلية التقنية الصحية والطبية | | |
| Main References (Sources) | | | محاضرات الكلية التقنية الصحية والطبية | | |
| Recommended Supplementary Books and References (Scientific journals, reports, etc.) | | | Optometry magazines of American ophthalmology and optometry acadimy | | |
| Electronic References and Internet Resources | | | https://v2020eresource.org/content/files/Instruments_book.pdf | | |

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Course Description Template

| Week | Hours | Required Learning Outcomes | Unit or subject name | Learning method | Evaluation method |
|------|-------|-----------------------------------|---|-----------------|---------------------------------|
| 1 | 6 | The student understands the topic | Anatomy of the face | theoretical | general question And discuss |
| 2 | 6 | The student identifies the topic | Anatomy of the face | theoretical | general question And discuss |
| 3 | 6 | The student understands the topic | Causes of the eye damage and facial damage | theoretical | general question And discuss |
| 4 | 6 | The student identifies the topic | Types of eye damage | Theoretical | general question And discuss |
| 5 | 6 | The student identifies the topic | Patient assessment for artificial eye | theoretical | general question And discuss |
| 6 | 6 | The student identifies the topic | Materials used for ocular and orbital prostheses | theoretical | general question And discuss |
| 7 | 6 | The student identifies the topic | Impression materials for ocular and orbital prosthesis | theoretical | general question And discuss |
| 8 | 6 | The student identifies the topic | How to reconstruct the eye damage | theoretical | general question And discuss |
| 9 | 6 | The student identifies the topic | How to reconstruct the eye damage and its associated structures | theoretical | general question And discuss |

| | | | | | |
|----|---|----------------------------------|---|-------------|---------------------------------|
| 10 | 6 | The student identifies the topic | Impression of the eye defect | theoretical | general question And discuss |
| 11 | 6 | The student identifies the topic | Impression of the eye and its associated structure | theoretical | general question And discuss |
| 12 | 6 | The student identifies the topic | Developing the ocular model | theoretical | general question And discuss |
| 13 | 6 | The student identifies the topic | Developing the facial model | theoretical | general question And discuss |
| 14 | 6 | The student identifies the topic | Wax pattern the ocular defect | theoretical | general question And discuss |
| 15 | 6 | The student identifies the topic | Wax pattern the facial defect | theoretical | general question And discuss |
| 16 | 6 | The student identifies the topic | Try in anterior wax pattern on patient and make the modification | theoretical | general question And discuss |
| 17 | 6 | The student identifies the topic | Constrict the posterior wax pattern of missing eye | theoretical | general question And discuss |
| 18 | 6 | The student identifies the topic | How to flask the eye wax pattern | theoretical | general question And discuss |
| 19 | 6 | The student identifies the topic | Types of silicon material used in orbital prosthesis | theoretical | general question And discuss |
| 20 | 6 | The student identifies the topic | Coloring the silicon material used in eye prosthesis | theoretical | general question And discuss |
| 21 | 6 | The student identifies the topic | Curing the silicon material inside the mold of the flask with pattern | theoretical | general question And discuss |

| | | | | | |
|----|---|----------------------------------|---|-------------|---------------------------------|
| 22 | 6 | The student identifies the topic | Placement the ready-made ocular prosthesis inside the anterior part of the eye prosthesis | theoretical | general question And discuss |
| 23 | 6 | The student identifies the topic | Mounting the anterior part with the posterior part | theoretical | general question And discuss |
| 24 | 6 | The student identifies the topic | Placement the ready-made eyelash and eyebrow on the eye prosthesis | theoretical | general question And discuss |
| 25 | 6 | The student identifies the topic | Trying eye prosthesis by insertion and removing | theoretical | general question And discuss |
| 26 | 6 | The student identifies the topic | Complete finished eye prosthesis | theoretical | general question And discuss |
| 27 | 6 | The student identifies the topic | Orbital implant for ocular prosthesis | theoretical | general question And discuss |
| 28 | 6 | The student identifies the topic | Traditional Retention methods for orbital prosthesis | theoretical | general question And discuss |
| 29 | 6 | The student identifies the topic | Bar and clip , magnetic implant to fix eye prosthesis | theoretical | general question And discuss |
| 30 | 6 | The student identifies the topic | How to construct the combination ocular prosthesis how to relined the ocular prosthesis , relining the ocular cavity | theoretical | general question And discuss |