Course Description / Level Two

Medical Psychology	**Course name -1**
MTCD201	**Course code -2**
First semester / 2025-2026	**Year/Semester -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
30Theoretical hour / 2 units	**Number of credit hours (total) / Number of units (total) -6**
.M.M Taha Akram Shabib	**Name of the course supervisor (than one name if there is more) mention all names, -7**

Course objectives -8

The objectives of the Medical Psychology course focus on studying the relationship between psychological and health aspects, and the impact of psychological factors on .health and illness

Teaching and learning strategies -9

A. Cognitive objectives

A1- Understanding the psychological factors associated with health : Studying how emotions and behaviors affect patients' health and improve vision screening .outcomes

students to assess the **A2- Developing psychological assessment skills:** Enabling psychological state of patients and how it affects their physical treatment.

A3- Teaching coping strategies: Providing techniques to help patients cope with .pain and anxiety, and enhancing their ability to cope with their health conditions

A4- Enhancing interaction between practitioners and patients: Understanding the importance of effective communication and how it can impact treatment outcomes.

A5- Exploring the psychological effects of illness and injury: Studying how injuries or chronic diseases affect the psychological state of patients.

A6- Improving cultural awareness: Enhancing understanding of how cultural and social factors influence mental health and therapeutic behaviors.

A7- Application of psychological theories in vision examination: Study of how psychological principles can be used to improve therapeutic techniques.

A8- Guiding patients towards a healthy lifestyle: Providing the necessary .knowledge to help patients make healthy decisions that enhance their recovery

. B. Course specific skill objectives

B1 - Effective communication skills : Enhancing the ability to communicate effectively with patients, including active listening, expressing empathy, and asking appropriate questions to understand their needs.

B2 - Psychological assessment : Developing skills to assess patients' psychological status through psychological assessment tools and observation, and identifying factors that may affect their therapeutic progress.

B3 - Apply coping strategies: Learn how to use techniques such as relaxation, mental imagery, and breathing techniques to help manage anxiety and pain in patients .

B4 - Develop comprehensive treatment plans: Learn how to integrate psychological knowledge with vision screening plans, so that they include both psychological and physical aspects of treatment.

B5 - Dealing with stressful situations : Acquiring skills to deal with patients suffering from stress or depression and the impact of this on the recovery process.

B6 - Develop leadership and teamwork skills: Enhancing the ability to work effectively within a multidisciplinary team, including physicians and psychologists.

B7 - Training in providing psychological support: Learn how to provide psychological support to patients and their families during the different stages of treatment.

to **B8 - Analyzing behaviors and interacting with patients:** Gaining the ability analyze behaviors and interact in ways that support the improvement of patients' psychological and physical health

Teaching and learning methods

,Theoretical lectures , practical lectures, clinical training, group discussions presentations

Evaluation methods

Daily tests, midterm exams, and final exams

C. Affective and value- based goals

A1- Enhancing empathy and compassion: Developing a sense of empathy for patients and understanding their psychological and physical experiences, which enhances the quality of care provided.

A2- Respect for cultural diversity: Promoting the values of respect for cultural and social diversity and recognizing the importance of differences in how cultural factors affect mental health.

A3- Promoting ethical values: Teaching students ethical values related to privacy, confidentiality, and respect in dealing with patients and their health information.

A4- Encouraging social responsibility: Encouraging students to be socially responsible by providing psychological support to the community and sharing psychological knowledge to improve public health.

A5- Enhancing professional commitment: Enhancing the values of commitment to professional quality and ethics in providing healthcare, including commitment to achieving positive outcomes for patients.

A6- Developing self-awareness: Encouraging students to reflect on their personal feelings and experiences and how they impact their professional practice and interactions with patients.

A7- Promoting teamwork and cooperation: Encouraging values related to teamwork and cooperation between different disciplines in providing health care.

A8- Encouraging continuous learning: Promoting the value of continuing education and personal and professional development to keep pace with the latest .developments in the field of medical psychology and optometry

Teaching and learning methods

(In-person lectures)

- **Evaluation methods**

Daily tests, midterm exams, and final exams

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

D1- Effective communication skills: The ability to express ideas clearly and listen to others, which facilitates interaction with patients and colleagues.

Critical thinking skills : Develop the ability to analyze information, make informed decisions, and solve problems in clinical contexts.

D3- Adapting to changes: The ability to adapt to different work environments and rapid changes in the healthcare field.

D4- Organizational and time management skills: Developing the ability to manage time effectively, organize tasks, and set priorities to achieve goals.

D5- Research and development skills: the ability to search for new information, evaluate sources, and apply them in practical contexts to improve therapeutic practices.

D6- Technological skills: Enhancing the ability to use modern technology in treatment and healthcare, including the use of software and medical devices.

D7- Leadership skills: Developing leadership skills that help direct teams and work collectively to achieve common goals.

D8- Creative thinking skills: Enhancing the ability to think creatively to develop new solutions to challenges that may be encountered in the field of vision examination.

D9- Social skills: Improving the ability to build relationships and enhance cooperation with individuals from different backgrounds and specializations.

D10- Self-learning and continuous development: Reinforcing the importance of .self-learning and continuous development as part of a successful career

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Introduction to the science of psychology	knowledge	2 theoretical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Schools of thoughts in psychology – Gestalt psychology – psychoanalysis	knowledge	2 theoretical	the second
Reports, oral and written	whiteboard, powerpoint slides	Humanistic psychology - Behaviorism	knowledge	2 theoretical	the third

theoretical exams					
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Mental process: Memory – Forgetting – Thinking – Language	knowledge	2 theoretical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Senses - Attention - Imagination	knowledge	2 theoretical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The Structural Model of Personality	knowledge	2 theoretical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Psychological Defense Mechanisms	knowledge	2 theoretical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Methods of Study in Psychology	knowledge	2 theoretical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The psychological causes for the appearance of disorder	knowledge	2 theoretical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The psychosomatic disorder: Hypochondriasis - Somatization disorder	knowledge	2 theoretical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The doctor – patients relationship – medical consultation	knowledge	2 theoretical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Psychotherapy – Medical applications of psychotherapy	knowledge	2 theoretical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Biological base of behavior	knowledge	2 theoretical	thirteenth
Reports, oral and written	whiteboard, powerpoint slides	Suicide: The etiology of suicide	knowledge	2 theoretical	fourteenth

theoretical exams					
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Drug Addiction	knowledge	2 theoretical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
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Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	Main References (Sources)
	Recommended books and references (scientific journals, (...reports
	Electronic references and websites

metabolism	**Course name -1**
MTCD202	**Course code -2**
Second semester / 2025-2026	**Year/Semester -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
theoretical hours + 30 practical hours / 3 30 units	**Number of credit hours (total) / Number of units (total) -6**
M.M. Zeina Idris Khalaf	**Name of the course supervisor mention all names, if there is more than one name) -7**

Course objectives -8

Focuses on the study of how the body processes food and uses it to produce energy .and support various body functions

Teaching and learning strategies -9

A. Cognitive objectives

A1- Understanding metabolic processes: Enabling students to understand how metabolism occurs in the body, including the metabolism of fats, carbohydrates, and proteins.

A2- Application of nutritional knowledge: Teaching students how to apply nutritional knowledge to improve athletic performance and the overall health of patients.

A3- Nutritional status assessment: Training students on how to assess the nutritional status of patients and use the necessary tools for this.

A4- Dietary planning: Enabling students to design appropriate dietary plans that meet the needs of patients in different treatment conditions.

A5- Understanding the effect of nutrition on healing: Studying how proper nutrition affects the healing process and recovery from injuries.

A6- Nutrition education: Enhancing the ability to educate patients about the .importance of proper nutrition and how to achieve it in their daily lives

. B. Course specific skill objectives

B1 - Nutritional Data Analysis: Develop students' skills in analyzing nutritional information, including reading food labels and understanding the contents of foods.

B2 - Nutritional Status Assessment: Acquire the ability to conduct a comprehensive assessment of patients' nutritional status using tools such as questionnaires and physical scales.

B3 - Meal Planning: Learn how to design customized meal plans that fit patients' needs, including calculating calories and nutrients.

B4 - Patient Guidance: Improve communication skills to guide patients on choosing healthy foods and how to improve their eating habits.

B5 - Implementing nutritional programs: Acquiring the ability to implement various nutritional programs that suit different patient conditions.

B6 - Use of technology: Develop skills in using technological programs and applications that help in tracking diet and planning meals.

B7 - Research Analysis: Acquire skills to analyze research and studies related to nutrition and understand their impact on clinical practice.

B8 - Evaluating Effects: Learn how to evaluate the impact of dietary changes on .physical performance and injury recovery

Teaching and learning methods

,Theoretical lectures , practical lectures, clinical training, group discussions presentations

Evaluation methods

Daily tests, midterm exams, and final exams

C. Affective and value- based goals

A1- Appreciating the importance of nutrition: Promoting the value of proper nutrition as an essential element for maintaining health and well-being.

A2- Respecting food diversity: Developing students' awareness of the importance of food diversity and respecting different cultures in food practices.

A3- Enhancing professional responsibility: Developing a sense of responsibility towards providing sound and appropriate nutritional advice to patients, taking into account their individual needs.

A4- Developing empathy: Enhancing empathy skills and the ability to understand patients' needs and provide emotional support regarding lifestyle changes.

A5- Encouraging personal commitment: Reinforcing the value of personal commitment to adopting healthy eating habits in the lives of the students themselves as a role model for patients.

A6- Ethical awareness: Promoting awareness of ethical values in providing food services, including respecting patients' privacy and taking into account their cultural differences.

A7- Enhancing teamwork: Developing the value of cooperation and teamwork among specialists in different fields to improve health outcomes for patients.

A8- Appreciating the importance of continuing education: Encouraging students .to continue learning and self-development in the field of nutrition and health

Teaching and learning methods

(In-person lectures)

- **Evaluation methods**

Daily tests, midterm exams, final exams

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

D1- Communication skills: Improve the ability to communicate effectively with patients, colleagues, and family members, including active listening and expressing ideas clearly.

D2- Teamwork skills: Developing the ability to work within a multidisciplinary team, which enhances cooperation and leads to better outcomes for patients.

D3- Critical thinking skills: Enhancing the ability to analyze information and make evidence-based decisions, enabling students to provide effective nutritional recommendations.

D4- Time management skills: Acquiring time management skills and setting priorities to ensure the achievement of academic and professional goals.

D5- Research and analysis skills: Developing the ability to conduct research, analyze data, and evaluate scientific studies related to nutrition and metabolism.

D6- Innovative problem-solving skills: Enhancing the ability to think creatively and provide innovative solutions to challenges that nutritionists and optometrists may face.

D7- Self-learning skills: Encouraging students to develop continuous learning and self-assessment skills to ensure improvement of their professional level.

work **D8- Adaptation skills:** Enhancing the ability to adapt to changes in different .environments and respond positively to challenges

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Metabolism	Knowledge and application	2 Theoretical + 2 practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Enzymes	Knowledge and application	2 Theoretical + 2 practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Michaels – Menten theory	Knowledge and application	2 Theoretical + 2 practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Carbohydrates Metabolism	Knowledge and application	2 Theoretical + 2 practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Lactic Acid Fermentation	Knowledge and application	2 Theoretical + 2 practical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Citric and cycle /TCA cycle / Krebs cycle	Knowledge and application	2 Theoretical + 2 practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The electron transport chain	Knowledge and application	2 Theoretical + 2 practical	Seventh
Reports, oral and written	whiteboard, powerpoint slides	Fructose Metabolism	Knowledge and application	2 Theoretical + 2 practical	The eighth

theoretical exams					
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Galactose Metabolism	Knowledge and application	2 Theoretical + 2 practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Glycogen metabolism	Knowledge and application	2 Theoretical + 2 practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Protein metabolism	Knowledge and application	2 Theoretical + 2 practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Protein Synthesis	Knowledge and application	2 Theoretical + 2 practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Lipid Metabolism	Knowledge and application	2 Theoretical + 2 practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Cholesterol metabolism	Knowledge and application	2 Theoretical + 2 practical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Nucleotide metabolism	Knowledge and application	2 Theoretical + 2 practical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
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Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	Main References (Sources)

	Recommended books and references (scientific journals, (...reports
	Electronic references and websites

Baath regime crimes in Iraq	**Course name -1**
NTU203	**Course code -2**
First semester / 2025-2026	**Year/Semester -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
30 Theoretical hour / 2 units	**Number of credit hours (total) / Number of units (total) -6**
A.M.D. Shimaa Ibrahim Taha	**Name of the course supervisor mention all names, if there is more) (than one name -7**
Course objectives - 8	
Focuses on studying the crimes and practices committed by the Ba'ath regime in Iraq .during its rule	
Teaching and learning strategies -9	
A. Cognitive objectives **A1- Understanding the historical context:** Identifying the political and social conditions that led to the emergence of the Baath regime in Iraq and how this affected the country. **A2- Analysis of violations** : Studying the crimes committed by the regime, such as genocide, torture, and arbitrary arrests, and their effects on Iraqi society.	

A3- Impact assessment: Assessment of the psychological, social and economic impacts of the crimes committed by the Baath regime on individuals and society.

A4- Promoting awareness of rights: Enhancing understanding of human rights and relevant international laws, and how they can be used to hold accountable those responsible for these crimes.

A5- Study of transitional justice: Identifying the transitional justice initiatives and compensations that were taken after the fall of the regime and how they impacted national reconciliation.

to **A6- Evidence Analysis:** Learn how to analyze documents and testimonies related crimes, and understand the importance of archiving and historical documentation.

A7- Enhancing critical thinking: Developing critical thinking skills by analyzing information and evidence related to crimes and interpreting them in their historical .and political context

. B. Course specific skill objectives

B1 - Enhancing empathy: Developing the ability to empathize with victims and their families, and to understand their suffering resulting from violations committed by the regime.

B2 - Raising awareness of human values: promoting the values of justice, equality and respect for human rights, and recognizing the importance of protecting these values in societies.

B3 - Appreciating Cultural Diversity: Promoting appreciation of cultural and religious diversity in Iraq, and understanding how violations affect relations between different communities.

B4 - Stimulating critical moral thinking: Encouraging students to think critically about moral issues related to crimes, such as individual and collective responsibility.

B5 - Developing a sense of responsibility: Enhancing the sense of responsibility towards social change and contributing to building a more just society.

B6 - Enhancing the capacity for effective participation : Encouraging students to participate in activities that support human rights and reconciliation, such as awareness-raising and community education.

B7 - Dealing with pain and loss: Providing spaces to talk about the pain and loss resulting from violations, which contributes to individual and collective healing .processes

Teaching and learning methods

,Theoretical lectures , practical lectures, clinical training, group discussions presentations

Evaluation methods

Daily tests, midterm exams, and final exams

C. Affective and value- based goals

A1- Developing empathy: Enhancing the ability to understand the feelings of victims and their families, which helps students connect with human suffering.

A2- Awareness of psychological effects: Understanding the psychological and social effects of violations on individuals and societies, which enhances a deep understanding of the psychological consequences of crimes.

A3- Encouraging emotional critical thinking: Enhancing the ability to think critically about emotional experiences associated with crimes, and how they can affect the formation of individual and collective identity.

A4- Valuing individual experiences: Reinforcing the importance of listening to the personal experiences of survivors, which contributes to building a culture of respect .and appreciation

A5- Promoting human rights values: Affirming the importance of human rights as a basis for protecting human dignity, and raising awareness of the need to defend them.

A6- Encouraging justice and equality: Promoting the values of justice and equality, and emphasizing the importance of holding those responsible for crimes accountable.

A7- Valuing peace and reconciliation : Encouraging values related to peace and reconciliation, and supporting the importance of building a society characterized by tolerance and mutual respect.

A8- Promoting commitment to active citizenship: Motivating students to actively participate in society by working to promote human rights and contribute to building a .more just society

Teaching and learning methods

(In-person lectures)

- **Evaluation methods**

Daily tests, midterm exams, and final exams

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

D1- Research and analysis skills:

Information gathering: The ability to research historical and legal information related to crimes.

Data analysis: Analyzing evidence and testimonies to understand different contexts and assess their validity.

D2- Communication skills:

Effective Communication: Develop the ability to express ideas clearly, both in writing and orally, including presentations and discussions.

Active Listening: Enhancing listening skills to understand others' perspectives and appreciate different experiences.

D3- Critical thinking skills:

Critical evaluation: The ability to think critically about information and ideas, which helps in making informed decisions.

Ethical Analysis: Understanding the ethical aspects of historical and societal issues related to crimes.

D4- Teamwork skills:

Collaboration: Enhancing the ability to work within multidisciplinary teams, contributing to the development of group projects that reflect a diverse understanding of issues.

Conflict Resolution: Learn how to deal with conflicts constructively and achieve positive outcomes.

D5- Self-management skills:

Planning and Organization: The ability to develop personal and academic plans to achieve goals effectively.

Time management: Develop time management skills to ensure balance between study and other activities.

D6- Creative thinking skills:

Innovating solutions: Developing the ability to think outside the box and find new solutions to complex problems.

Project Development: Ability to envision and design projects aimed at raising awareness on human rights issues.

D7- Cultural and social skills:

Cultural Awareness: Promoting understanding of cultural and religious diversity in Iraqi society, thus enhancing understanding and tolerance.

Social Responsibility: Promoting a sense of responsibility towards society and participating in initiatives that promote human rights and reconciliation.

D8- Technology skills:

Use of technology: The ability to use modern technology in research and .communication, such as using digital tools to collect and analyze information

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Violations of rights and freedoms	knowledge	2 theoretical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	A descriptive overview of the political systems in (Iraq (1921-2003	knowledge	2 theoretical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The Baath regime's violations of public rights and freedoms	knowledge	2 theoretical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The impact of the Baath regime's behavior on society	knowledge	2 theoretical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The impact of the transitional phase in combating authoritarian politics	knowledge	2 theoretical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Psychological field	knowledge	2 theoretical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	social field	knowledge	2 theoretical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Religion and State	knowledge	2 theoretical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Culture, media and the militarization of society	knowledge	2 theoretical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The impact of oppression and wars on the environment and population	knowledge	2 theoretical	tenth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The use of internationally prohibited weapons and environmental pollution	knowledge	2 theoretical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	scorched earth policy	knowledge	2 theoretical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Draining the marshes and forced migration	knowledge	2 theoretical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Destruction of the agricultural and animal environment and radioactive contamination	knowledge	2 theoretical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Mass graves and bombing of places of worship	knowledge	2 theoretical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
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Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	Main References (Sources)
	Recommended books and references (scientific journals, (...reports
	Electronic references and websites

Professional ethics	**Course name -1**
NTU204	**Course code -2**
Second semester / 2025-2026	**Year/Semester -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
30 Theoretical hour / 2 units	**Number of credit hours (total) / Number of units (total) -6**
.A M. D. Shimaa Ibrahim Taha	**Name of the course supervisor (than one name if there is more) mention all names, -7**

Course objectives -8

It focuses on promoting a deep understanding of the ethical values and principles that .individuals should adopt in their fields of work

Teaching and learning strategies -9

A. Cognitive objectives

A1- Understanding basic ethical principles:

Learn about key ethical values and principles such as integrity, confidentiality, and respect, and how to apply them in the field of eye examination.Understanding the therapist's responsibility to patients, colleagues, and the community.

A2- Identifying professional laws and standards:

Understanding the laws and regulations relevant to the practice of optometry, including regulations governing the profession and patient care.Learn about the approved professional regulations and standards that define how to practice the profession safely and responsibly.

A3- Analysis of ethical issues in health care:

The ability to analyze ethical problems and issues that may arise in daily work situations, such as challenges related to patient privacy, informed consent, and conflicts of interest.Learn how to handle difficult situations ethically by using an ethical framework.

A4- Distinguishing between rights and duties:

Learn about patients' rights and therapist responsibilities, including the right to privacy, information, and access to appropriate treatment.

A5- Enhancing critical thinking:

Develop critical thinking skills to analyze ethical situations and make professional decisions based on sound ethical foundations.The ability to recognize the ethical consequences of decisions and actions taken in optometry practice.

A6- Understanding professional relationships:

Recognizing the importance of building professional relationships based on mutual respect and trust between therapists, patients, and colleagues.Study how ethical values can influence the quality of health care and professional relationships.

A7- Identifying the ethics of scientific research:

Understand the ethical principles associated with scientific research in the field of vision examination, including how to respect the rights of research participants and ensure transparency and integrity in the presentation of results.

A8- Promoting responsible professional practices:

Understand the importance of responsible professional practices and how to ensure compliance with ethical standards in all aspects of work. Study how to handle ethical .violations and report them when necessary

. B. Course specific skill objectives

B1 - Ethical decision-making skills:

Develop the ability to make sound ethical decisions when dealing with complex professional situations.

The ability to use an ethical framework to analyze and evaluate options in situations that require an ethical solution.

B2 - Effective communication skills:

Enhance oral and written communication skills with patients and colleagues, while observing ethical values such as honesty and respect.Ability to explain complex ethical decisions to patients in a clear and understandable manner, and respect the patient's right to participate in making decisions about their care.

B3 - Conflict resolution skills:

Learn how to handle ethical and professional conflicts in an effective and constructive manner.The ability to negotiate and reach solutions that satisfy all parties involved, while maintaining a commitment to ethical values.

B4 - Confidentiality and information protection skills:

Develop the ability to handle personal and sensitive patient information in a manner that respects privacy and confidentiality.

Learn how to store and process medical information in a secure manner that complies with legal and ethical standards.

B5 - Skills for dealing with complex cases:

The ability to identify complex ethical situations that may arise in clinical practice, such as providing care in situations of conflict of interest or special patient circumstances.

Learn how to provide optimal care, taking into account ethical and humane considerations when dealing with different patients, especially sensitive or vulnerable cases.

B6- Cooperationand teamwork skills:

Develop teamwork skills with the medical team and support professions in a healthcare environment, taking into account ethical aspects when dealing with colleagues.Enhance the ability to provide assistance and advice to colleagues .regarding ethical issues

Teaching and learning methods

,Theoretical lectures , practical lectures, clinical training, group discussions presentations

Evaluation methods

Daily tests, midterm exams, and final exams

C. Affective and value- based goals

A1- Enhancing empathy with patients:

Developing students' ability to understand and empathize with patients' feelings and pain, which enhances human communication and personal care.Instilling the importance of respecting patients' feelings and working to provide care that takes into account their emotional and psychological needs.

A2- Developing a sense of moral responsibility:

Promote a sense of responsibility towards patients and society in all aspects of professional practice.

Instilling a commitment to providing medical care in an ethical and transparent manner, and keeping the patient's interest above all else.

A3- Enhancing self-confidence in making ethical decisions:

Developing students' self-confidence when faced with situations that require complex ethical decisions.

Instilling a belief in the importance of making decisions based on ethical and professional principles.

A4- Developing moral sensitivity:

To increase students' awareness of cultural and ethical sensitivities in dealing with patients of diverse social, religious and cultural backgrounds. Promote awareness of the importance of respecting the values and beliefs of patients and colleagues.

A5- Encouraging personal commitment to continuous development:

Promote awareness of the importance of continuous personal development in the field of professional ethics.

Promote the desire for self-improvement and continuous learning to ensure higher .adherence to ethical standards

Teaching and learning methods

(In-person lectures)

- **Evaluation methods**

Daily tests, midterm exams, and final exams

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

D1- Effective communication skills:

Ability to communicate clearly and effectively with patients, colleagues, and medical team members.Improve active listening skills to better interact with patients' problems and understand their needs.Ability to provide detailed and clear explanations of complex ethical issues.

D2- Critical thinking and problem-solving skills:

Develop critical thinking skills to analyze complex ethical situations and provide solutions based on professional values.

The ability to make informed and sound decisions when facing ethical and professional challenges at work.

D3- Teamwork and cooperation skills:

Enhance the ability to work effectively as part of a multidisciplinary team, contributing to improved overall health care.Learn how to manage conflicts and solve problems collaboratively while maintaining ethical values.

D4- Self-management and organizational skills:

Develop the ability to organize time and tasks efficiently to ensure the provision of health care in a professional and sustainable manner.

Improve stress management skills and flexibility in dealing with difficult and complex situations in the work environment.

D5- Empathy and emotional communication skills:

The ability to show empathy and respect for the feelings of patients and coworkers, which fosters trust and positive interactions.

Develop emotional intelligence to understand the emotional reactions of others and interact with them appropriately.

D6- Ethical leadership skills:

Develop the ability to be a role model for ethical behavior and contribute to promoting a culture of integrity and transparency in the work environment. Ability to guide co-workers and vocational training students on how to handle ethical situations responsibly.

D7- Continuous learning and professional development skills:

Enhance the ability to continuously learn to keep pace with changes in ethical and professional standards.

Develop a sense of initiative to seek opportunities for self-improvement and development in professional and ethical fields.

D8- Adaptation and flexibility skills:

The ability to adapt to changing circumstances and new professional situations that may require different ethical decisions.

Improve skills in dealing with unexpected situations and maintaining ethical behavior at all times.

Ethical Counseling Skills -D9:

Ability to advise and counsel colleagues on ethical issues based on professional principles.

Improve mentoring skills and participate in developing ethical solutions to .professional conflicts

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Principles of professional ethics in the stages of civilizational developments	knowledge	2 theoretical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Principles of Professional Ethics in Arab and Islamic Civilization	knowledge	2 theoretical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Professional behavior: definition, concept, practical applications, and the relationship between employees and their supervisors	knowledge	2 theoretical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Basic professional ethics	knowledge	2 theoretical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Characteristics of professional ethics as a guide and guide to behavior	knowledge	2 theoretical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Characteristics and attributes of health workers: appearance, behavior, and commitment	knowledge	2 theoretical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	The moral and legal rights of the patient and dealing with and dealing with the behavior of the patient and his companions	knowledge	2 theoretical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Patterns Behavioral/Humanitarian Definition, nature, motives, and interpretations	knowledge	2 theoretical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Communication Styles/Linguistic and Non-Linguistic Definition, types and effects Designing successful communication methods	knowledge	2 theoretical	Ninth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides	How communication styles affect behavior, listening and hearing	knowledge	2 theoretical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Behavioral trends and tendencies Definition, classification, factors affecting it, methods of measuring it	knowledge	2 theoretical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Personality types and how to deal with them	knowledge	2 theoretical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Definition of personality, its types, and its relationship to profession Technician personality and its manifestations	knowledge	2 theoretical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Conditions of professional compatibility and the associated work relationship, its concept, conditions, and poor professional availability	knowledge	2 theoretical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides	Behavioral treatment of patients: receiving the patient, dealing with him, gaining his trust, and maintaining .professional secrets	knowledge	2 theoretical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-30

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

	Electronic references and websites

Physiology of the eye and vision	**Course name -1**
OPT201	**Course code -2**
Second semester 2025/2026	**Semester/Year -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
30 hour of theory + 45 hours of practical / 3 1 units	**Number of credit hours (total) / Number of units (total) -6**
millimeter Al-Jasser Mohammed Jasem	**Name of the course supervisor mention all names, if there is more) (than one name -7**

Course objectives -8

Understand the anatomical structure of the eye: Identify the different parts of the eye and .1 .their functions
Teaching the mechanisms of vision: studying how the eye processes light and converts it .2 .into nerve signals
Explore physiological processes: Understand how the retina, macula, and rod and cone .3 .cells work
.Study lighting and adaptation: Understanding how the eye adapts to different light levels .4
.Vision Disorders Analysis: Identify some common disorders and how they affect vision .5

Teaching and learning strategies -9

Anatomical structure of the eye .1
Mechanism of the eye .2
The concept of vision .3
Visual physiology .4
Factors affecting vision .5
Visual disturbances .6

Eye-brain interaction .7

. B. Course specific skill objectives

Application of visual inspection techniques .1
Visual data analysis .2
Interpretation of clinical results .3
Use of specialized medical devices .4
Developing scientific research skills .5
.Conduct simple physiological experiments .6
.Effective communication with patients about vision problems .7

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

A.1- Developing and enhancing thinking skills according to the student's .ability and moving him to a higher level of thinking

.A.2- The student should interact during the lecture

should listen attentively to the practical explanation in The student A3- .the laboratory

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

- **Evaluation methods**

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

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

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Visual acuity	Knowledge and application	2 theoretical 3 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Visual acuity cont .	Knowledge and application	2 theoretical 3 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Binocular vision, benefits of having 2 eyes	Knowledge and application	2 theoretical 3 + practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Optics and refraction of the image of the eye	Knowledge and application	2 theoretical 3 + practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Optics and refraction cont.the aging eye	Knowledge and application	2 theoretical 3 + practical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Pupillary reflex	Knowledge and application	2 theoretical 3 + practical	Sixth

Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Eye movements, types & coordinated movements**	**Knowledge and application**	**2 theoretical 3 + practical**	**Seventh**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Eye movements, types & coordinated movements**	**Knowledge and application**	**2 theoretical 3 + practical**	**The eighth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Cornea and sclera , anatomy**	**Knowledge and application**	**2 theoretical 3 + practical**	**Ninth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Cornea and seclera , cont. corneal transparency , responses to wounding**	**Knowledge and application**	**2 theoretical 3 + practical**	**tenth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Cornea cont. wounding healing corneal nutrition vit.A & cornea**	**Knowledge and application**	**2 theoretical 3 + practical**	**eleventh**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Aqueous shumor**	**Knowledge and application**	**2 theoretical 3 + practical**	**twelfth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Aqueous humor and IO P**	**Knowledge and application**	**2 theoretical 3 + practical**	**thirteenth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	**Aqueous humor and IO P**	**Knowledge and application**	**2 theoretical 3 + practical**	**fourteenth**
Reports, oral and written theoretical exams	**whiteboard, powerpoint slides, hands-on experiments**	The lens	**Knowledge and application**	**2 theoretical 3 + practical**	**fifteenth**

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-31

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

Advanced Optical Devices	Course name -1
OPT204	Course code -2
Second semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
30 hour of theory + 60 hours of practical work / 4 units 1	Number of credit hours (total) / Number of units (total) -6
M.M. Suleiman Masara Karim	Name of the course supervisor (mention all names, if there is more than one name) -7
Course objectives -8	
Understanding the physical fundamentals of optical devices: This course aims to provide students with a comprehensive understanding of the physical principles that govern the operation of optical devices, such as refraction, reflection, and lenses. 1 Applications of optical devices in daily life: It aims to explore how optical devices are used in a variety of applications, including photographymicroscopes and lenses used in eyeglasses. 2	

Optical Device Analysis and Design: Aims to develop students' skills in optical device analysis and design, including the use of specialized software and simulation to understand and improve optical performance.3.

Teaching and learning strategies -9

- :Learn about
.Explain the basic physical principles of optical devices .1
.Identify the types of optical devices and their different uses .2
.Analyze the impact of various factors on the performance of optical devices .3

. B. Course specific skill objectives

Application of visual inspection techniques .1
Visual data analysis .2
Interpretation of clinical results .3
Use of specialized medical devices .4
Developing scientific research skills .5
.Conduct simple physiological experiments .6

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

A.1- Developing and enhancing thinking skills according to the student's .ability and moving him to a higher level of thinking

.A.2- The student should interact during the lecture

should listen attentively to the practical explanation in The student A3- .the laboratory

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

- **Evaluation methods**

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital
D. General and transferable skills (other skills related to employability and . (personal development **.D1 . Skills of cooperation and teamwork** **.D2 . Computer typing skills** **.D3 . English communication skills** **.D4 . Skills of enduring work performance and solving problems** **. D5 . Internet conversation skills**

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction and general information	Knowledge and application	2 theoretical 4 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	General consideration for maintaining ophthalmic instruments and ophthalmic instruments decontamination	Knowledge and application	2 theoretical 4 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Ophthalmic instruments decontamination: (cleaning , disinfection, inspection, packaging, sterilization , transport	Knowledge and application	2 theoretical 4 + practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	risk of transmission of infection in devices used in clinic Tonometery , diagnostic contact lenses, contact lenses	Knowledge and application	2 theoretical 4 + practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Risk of transmission of infection in devices used in clinic Tonometery , diagnostic contact lenses, contact lenses	Knowledge and application	2 theoretical 4 + practical	Fifth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Test charts and trial case and frame	Knowledge and application	2 theoretical 4 + practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Test charts and trial case and frame	Knowledge and application	2 theoretical 4 + practical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinoscope	Knowledge and application	2 theoretical 4 + practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Auto refractometer	Knowledge and application	2 theoretical 4 + practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Auto refractometer	Knowledge and application	2 theoretical 4 + practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Test charts and trial case and frame	Knowledge and application	2 theoretical 4 + practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Test charts and trial case and frame	Knowledge and application	2 theoretical 4 + practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Tonometer types, contact and non-contact	Knowledge and application	2 theoretical 4 + practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Tonometer types, contact and non-contact	Knowledge and application	2 theoretical 4 + practical	fourteenth
Reports, oral and written	whiteboard, powerpoint slides,	Revision	Knowledge and	2 theoretical	fifteenth

theoretical exams	hands-on experiments		applicati on	4 + practi cal	

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-32

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

eye health	Course name -1
OPT205	Course code -2
Second semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours + 45 practical hours / 4 45 units	Number of credit hours (total) / Number of units (total) -6
Dr. Sadad Khairallah Rajab	Name of the course supervisor -7 mention all names, if there is more) (than one name
Course objectives -8	
Understand the basics of eye health: Recognize the importance of eye health and its .1 .impact on quality of life	

Identify eye diseases: Identify common eye diseases, such as cataracts, glaucoma, and eye .2
.infections
Teaching prevention methods: Learning about methods for preventing eye diseases, .3
.including regular checkups and a healthy lifestyle
.Develop practical skills: acquire skills in eye examination and vision assessment .4
Raising community awareness: Enhancing awareness about the importance of eye health .5
.in the community and appropriate awareness methods

Teaching and learning strategies -9

Knowledge of eye anatomy: Understanding the anatomical structure of the eye, its parts, .1
.and its functions
.Understanding the functions of the eye: Learn how the eye works in the process of vision .2
Recognizing eye diseases: Knowing the causes, symptoms, and causative factors of .3
.common eye diseases
Knowledge of examination methods: Learn about different methods of eye examination, .4
.including clinical examinations and modern techniques
Understanding the impact of environmental factors: Knowing how environmental factors .5
.and lifestyle affect eye health
Knowledge of treatment and prevention: Learn about the different treatment options for .6
.eye diseases and ways to prevent them
Understand the importance of regular checkups: Realize the importance of regular .7
.checkups for early detection of eye problems

. B. Course specific skill objectives

Develop clinical examination skills and acquire the ability to perform basic eye -
.examinations
Use medical equipment and learn how to use the tools and devices used to diagnose eye -
.problems
Apply treatment techniques and acquire the skills necessary to apply basic treatments -
.such as using eye drops correctly

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and
(professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

A.1- Developing and enhancing thinking skills according to the student's
.ability and moving him to a higher level of thinking

.A.2- The student should interact during the lecture

should listen attentively to the practical explanation in The student A3- .the laboratory
(In-person lectures), summer and professional training, graduation projects, . field visits, and practical training in clinical subjects
• Evaluation methods
Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital
D. General and transferable skills (other skills related to employability and . (personal development .D1 . Skills of cooperation and teamwork .D2 . Computer typing skills .D3 . English communication skills .D4 . Skills of enduring work performance and solving problems . D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction: review of anatomy & physiology of the eye	Knowledge and application	3 theoretical 3 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction: history & examination of the eye	Knowledge and application	3 theoretical 3 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction: certain ophthalmic terms.(terminology)	Knowledge and application	3 theoretical 3 + practical	the third

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Primary eye care	Knowledge and application	3 theoretical 3 + practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Primary eye care	Knowledge and application	3 theoretical 3 + practical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Screening procedures in ophthalmology	Knowledge and application	3 theoretical 3 + practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Screening procedures in ophthalmology	Knowledge and application	3 theoretical 3 + practical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	School eye screening programs	Knowledge and application	3 theoretical 3 + practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Concept of community ophthalmology sticky eye, watery eye	Knowledge and application	3 theoretical 3 + practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Concept of community ophthalmology flashes of light, floating object	Knowledge and application	3 theoretical 3 + practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	in visual field Concept of community ophthalmology long term glaucoma monitoring	Knowledge and application	3 theoretical 3 + practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The epidemiology of blindness (general principles)	Knowledge and application	3 theoretical 3 + practical	twelfth
Reports, oral and written	whiteboard, powerpoint slides,	The epidemiology of blindness (disease specific strategy)	Knowledge and	3 theoretical	thirteenth

theoretical exams	hands-on experiments		applicati on	3 + practi cal	
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The right to sight (vision 2020)	Knowle dge and applicati on	3 theore tical 3 + practi cal	fourtee nth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Revision	Knowle dge and applicati on	3 theore tical 3 + practi cal	fifteent h

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-33

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

Vital statistics	Course name -1
MTCD203	Course code -2
First semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours + 30 practical hours / 3 30 units	Number of credit hours (total) / Number of units (total) -6
M.M. Nour Amer Fadel	Name of the course supervisor (mention all names, if there is more than one name) -7
Course objectives -8	
.Understanding the basic concepts of biostatistics and their applications in health fields - .Identify the types of statistical data and methods of collecting and analyzing them - .Knowledge of statistical methods used in analyzing biological and medical data - .Understand the concepts of probability and their importance in biostatistics -	
Teaching and learning strategies -9	

.Enhancing the ability to make decisions based on statistical data -
.Developing critical thinking skills when evaluating statistical studies and research -
.Encourage teamwork and cooperation in statistical research projects -
.Promote adherence to ethical standards in data collection and analysis -

. B. Course specific skill objectives

statistical software to analyze data, such as Acquire skills in using -SPSS orR.
.Develop the ability to correctly design experiments and statistical studies -
.Apply appropriate statistical methods to analyze data and extract results -
.Improving skills in interpreting statistical results and writing scientific reports -

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

The Biostatistics course aims to develop positive values and attitudes in students towards the subject and its applications in the field of health, such as appreciating the importance of data in making health decisions, paying attention to the accuracy of research, cooperating in work groups, adhering to professional ethics, and actively participating in data analysis and contributing to improving public .health

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

- **Evaluation methods**

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

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

.D1 . Skills of cooperation and teamwork
.D2 . Computer typing skills
.D3 . English communication skills
.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction Objectives Of Statistics, The Major Objectives Of Statistics,	Knowledge and application	2 theoretical +2 practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Classification Of Statistics, Stages Of Statistical Method in Scientific Research Sources of Data collection	Knowledge and application	2 theoretical +2 practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	sources of Data collection	Knowledge and application	2 theoretical +2 practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Samples: Introduction,	Knowledge and application	2 theoretical +2 practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Types of Samples	Knowledge and application	2 theoretical +2 practical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Types of data: Introduction, constant data, variables, Types of variables .	Knowledge and application	2 theoretical +2 practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Data display: Introduction, Display data numerically as Simple display or Raw data, Ordered	Knowledge and application	2 theoretical +2 practical	Seventh

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Display or Array , Data display frequency table	Knowledge and application	2 theoretical +2 practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Display data graphically	Knowledge and application	2 theoretical +2 practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Measures of central tendency	Knowledge and application	2 theoretical +2 practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Measures of Dispersion	Knowledge and application	2 theoretical +2 practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Measures of Skewness	Knowledge and application	2 theoretical +2 practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Kurtosis	Knowledge and application	2 theoretical +2 practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	General Review	Knowledge and application	2 theoretical +2 practical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Revision	Knowledge and application	2 theoretical +2 practical	fifteenth

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

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

Pharmacology	Course name -1
OPT208	Course code -2
First semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours / 2 units 30	Number of credit hours (total) / Number of units (total) -6
M.M. Mays Qasim Muhammad	Name of the course supervisor (mention all names, if there is more than one name) -7
Course objectives -8	
.Promoting awareness of ethical responsibility in the practice of pharmacology -	

Develop communication skills with patients to explain the use of medications and methods -
.of their administration
.Encouraging teamwork in research projects related to pharmacology -
.Enhancing compliance with safety standards in the storage and use of medicines -

Teaching and learning strategies -9

Understand the basic concepts of pharmacology and the mechanism of action of drugs in -
.the body
.Identify different types of medications, including therapeutic and preventive medications -
.Knowing the potential side effects of medications and how to manage them -
Understand the principle of dosage and how to determine the appropriate doses for each -
.medication

. B. Course specific skill objectives

.Acquire skills to evaluate drug interactions with other drugs and with foods -
.Develop the ability to read and understand prescriptions and drug leaflets -
Applying scientific knowledge in selecting appropriate medications for specific disease -
.conditions
Improving skills in using databases and scientific sources to search for pharmaceutical -
.information

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and
(professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

It focuses on developing positive attitudes and trends in the learner towards medicines, such as appreciating their role in improving the quality of life and patient safety, and a commitment to the safe and effective use of medicines, in addition to enhancing confidence .in pharmaceutical products and the health profession as a whole

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

- **Evaluation methods**

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

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

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Principles of Drug Therapy	Knowledge and application	2 theoretical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs Affecting the Autonomic Nervous System-I	Knowledge and application	2 theoretical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs Affecting the Autonomic Nervous System-II	Knowledge and application	2 theoretical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	rugs Affecting the Central Nervous System	Knowledge and application	2 theoretical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	rugs Affecting the Cardiovascular System -I	Knowledge and application	2 theoretical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs Affecting the Cardiovascular System - II	Knowledge and application	2 theoretical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs Affecting the Endocrine System Chemotherapeutic Drugs-I	Knowledge and application	2 theoretical	Seventh

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Chemotherapeutic Drugs -II	Knowledge and application	2 theoretical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Anti-inflammatory, Antipyretic, and Analgesic Agents	Knowledge and application	2 theoretical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Gastrointestinal and Antiemetic Drugs	Knowledge and application	2 theoretical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs for Disorders of the Respiratory System	Knowledge and application	2 theoretical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Anti-inflammatory, Antipyretic, and Analgesic Agents	Knowledge and application	2 theoretical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Anti-inflammatory, Antipyretic, and Analgesic Agents	Knowledge and application	2 theoretical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Drugs of Abuse	Knowledge and application	2 theoretical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Principles of Drug Therapy	Knowledge and application	2 theoretical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-35

Learning and Teaching Resources - 12	
	Required textbooks (curriculum (books, if available
Internet	Main References (Sources)

	Recommended books and references (scientific journals, (...reports
	Electronic references and websites

Laser in ophthalmology	**Course name -1**
OPT209	**Course code -2**
Second semester 2025/2026	**Semester/Year -3**
2025/9/1	**Date of preparation of the description -4**
In-person lectures	**Available forms of attendance -5**
theoretical hours + 30 practical hours / 3 30 units	**Number of credit hours (total) / Number of units (total) -6**
M.M. Haider Sobhi Fadel	**Name of the course supervisor mention all names, if there is more) (than one name -7**
Course objectives -8	

.Raising awareness of the importance of using lasers to improve eye health and vision -
Develop communication skills with patients to explain laser treatment procedures and its -
.benefits
.Encourage teamwork in medical teams to apply laser technologies effectively -
.Commitment to medical practice ethics and safety when using laser technologies -

Teaching and learning strategies -9

Understanding the basic principles of laser technology and its mechanism of action in -
.ophthalmology
Learn about the types of lasers used to treat eye diseases, such as non-surgical and surgical -
.lasers
Knowledge of the clinical applications of lasers in the treatment of various conditions, such -
.as cataracts, glaucoma, and retinopathy
.and potential risks of using lasers in the eyes Study the side effects -

. B. Course specific skill objectives

.Acquire skills to use laser devices correctly and safely -
.Developing the ability to evaluate medical conditions that require the use of lasers -
.Applying laser techniques in performing various operations under medical supervision -
.Improve skills in analyzing and interpreting the results of laser treatments -

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

Improving patients' quality of life by providing permanent alternatives to glasses and contact lenses, increasing their ability to live independently, reducing health risks associated with lenses, and contributing to early diagnosis and effective
.treatment of conditions such as corneal problems, myopia, and retinal detachment

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

- Evaluation methods

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

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

.D1 . Skills of cooperation and teamwork

.D2 . Computer typing skills

.D3 . English communication skills

.D4 . Skills of enduring work performance and solving problems

. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Lasers definition characteristics applications in eye	Knowledge and application	2 theoretical +2 practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Laser in medicine •Advantage disadvantage	Knowledge and application	2 theoretical +2 practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Types of Laser in medicine Excimer lasers (LASIK) Double frequency Nd/ YAG laser	Knowledge and application	2 theoretical +2 practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Microplus laser	Knowledge and application	2 theoretical +2 practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Femtosecond	Knowledge and application	2 theoretical +2 practical	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	laser Laser Safety	Knowledge and application	2 theoretical +2 practical	Sixth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Laser treatment for eyes (tissues and diseases)	Knowledge and application	2 theoretical +2 practical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Laser tissue interaction	Knowledge and application	2 theoretical +2 practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	laser in diagnostics (OCT)	Knowledge and application	2 theoretical +2 practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Confocal scanning laser ophthalmoscopy (CSLO)	Knowledge and application	2 theoretical +2 practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Laser doppler flowmetry (LDF)	Knowledge and application	2 theoretical +2 practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Photo Refractive Keratectomy (PRK)	Knowledge and application	2 theoretical +2 practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Laser treatment for eyes (tissues and diseases)	Knowledge and application	2 theoretical +2 practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Laser treatment	Knowledge and application	2 theoretical +2 practical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Revision	Knowledge and application	2 theoretical +2 practical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-36

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

Physiology of the retina	Course name -1
OPT202	Course code -2
Second semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours + 45 practical hours / 3 30 units	Number of credit hours (total) / Number of units (total) -6
M.M. Al-Jasser Mohammed Jassim	Name of the course supervisor mention all names, if there is more) (than one name -7

Course objectives -8

Understanding the chemical and electrical mechanisms that enable the retina to convert light into nerve signals sent to the brain to perceive images. The goals also include diagnosing and treating retinal diseases such as retinal detachment or optic nerve damage, by preserving or restoring vision through procedures such as lasers and .freezing, or through surgical interventions to repair tears and prevent complications

Teaching and learning strategies -9

It involves interacting with visual materials such as graphics, images, and videos, employing virtual reality(VR) technologies for retinal experience, as well as visual thinking network strategies to organize information and understand relationships between visual concepts, focusing on practical application through simulating eye examination tasks, and possibly eye tracking to assess learner responses, while .promoting effective communication and evidence-based learning

. B. Course specific skill objectives

Understanding the mechanism of light capture in retinal cells (cones and rods), the function of the optic nerve, and the importance of this information in identifying and diagnosing diseases and providing appropriate treatment plans, .including the use of modern examination devices to assess retinal health

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

The aim of the optometric technologist is to apply the knowledge acquired in retinal physiology to the diagnosis and treatment of eye diseases. This is achieved by promoting a deep understanding of the mechanics of retinal function, contributing to the development of advanced imaging and diagnostic techniques, and raising awareness of the importance of vision care among patients to improve their quality of .life

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

- Evaluation methods

Daily, midterm and final exams , weekly reports Patient seminars, clinical follow-up reports, and practical discussions followed by the practical lesson in . the hospital
D. General and transferable skills (other skills related to employability and . (personal development **.D1 . Skills of cooperation and teamwork** **.D2 . Computer typing skills** **.D3 . English communication skills** **.D4 . Skills of enduring work performance and solving problems** **. D5 . Internet conversation skills**

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction to the Retina Overview of the eye anatomy, position and role of the retina, retinal layers	Knowledge and application	2 theoretical 3 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Cell Types Photoreceptors (rods and cones), bipolar cells, ganglion cells, horizontal & amacrine cells	Knowledge and application	2 theoretical 3 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Phototransduction I	Knowledge and application	2 theoretical 3 + practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Phototransduction II	Knowledge and application	2 theoretical 3 + practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Layers and Signal Pathways Detailed study of each retinal layer, vertical and lateral pathways	Knowledge and application	2 theoretical 3 + practical	Fifth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Dark and Light Adaptation	Knowledge and application	2 theoretical 3 + practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Visual Fields and Retinal Mapping Retinotopic organization, macula and peripheral retina roles	Knowledge and application	2 theoretical 3 + practical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Blood Supply and Metabolism	Knowledge and application	2 theoretical 3 + practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Electrophysiology of the Retina	Knowledge and application	2 theoretical 3 + practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Color Vision Physiology Cone types, trichromatic theory, opponent process theory	Knowledge and application	2 theoretical 3 + practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Neurotransmitters in the Retina Glutamate, GABA, glycine, dopamine, and their roles	Knowledge and application	2 theoretical 3 + practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Processing of Visual Information Contrast detection, edge detection, motion detection	Knowledge and application	2 theoretical 3 + practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Diseases Affecting Retinal Physiology	Knowledge and application	2 theoretical 3 + practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Development and Plasticity Embryology of the retina, synaptic refinement, plasticity	Knowledge and application	2 theoretical 3 + practical	fourteenth
Reports, oral and written	whiteboard, powerpoint slides,	Revision and Case Studies	Knowledge and	2 theoretical	fifteenth

theoretical exams	hands-on experiments		application	3 + practical	

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-37

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

Optical devices and instruments	Course name -1
OPT203	Course code -2
First semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours + 60 practical hours / 4 30 units	Number of credit hours (total) / Number of units (total) -6
M.M. Suleiman Masara Karim	Name of the course supervisor (mention all names, if there is more than one name) -7

Course objectives -8

The course of Optical Instruments and Tools aims to provide students of the Department of Optometry with the knowledge and skills necessary to examine eyesight, determine the degree of vision, diagnose and treat vision problems such as strabismus, prescribe and manufacture medical and contact lenses, use optical devices, deal with ophthalmic prosthetics, in addition to paying attention to the maintenance and periodic .cleaning of devices

Teaching and learning strategies -9

Strategies that combine active and interactive learning, such as the use of simulations and advanced visual presentations, as well as continuous assessment and personalization of educational content, are used. These strategies rely on the integration of modern tools and technologies and virtual reality(VR) or augmented reality(AR) applications to provide immersive learning experiences, with an emphasis on observation and practical experimentation to .solve problems and apply knowledge in real-life contexts

. B. Course specific skill objectives

Providing optometry students with the skills necessary to handle optical devices. These skills include identifying the components and different types of devices, how to use and operate the devices accurately, maintaining and calibrating them correctly, applying different optical imaging techniques, analyzing the data produced by the devices, and solving problems that may arise during their use, in addition to linking these skills to practical applications in diagnosis and visual .care

Teaching and learning methods

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

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

Evaluation methods

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

C. Affective and value- based goals

It aims to instill high professional values in students by enhancing interest in learning and eye health care, encouraging creative initiatives to serve the community in the field of optics, and their commitment to professional ethics by providing accurate and responsible care to patients, and effective cooperation .with various specialties to raise the quality of life

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

- **Evaluation methods**

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

D. General and transferable skills (other skills related to employability and . (personal development
.D1 . Skills of cooperation and teamwork
.D2 . Computer typing skills
.D3 . English communication skills
.D4 . Skills of enduring work performance and solving problems
. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction to Optical Instruments	Knowledge and application	2 theoretical 4 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Basic Optical Principles Review	Knowledge and application	2 theoretical 4 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Lenses and Optical Components	Knowledge and application	2 theoretical 4 + practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Magnifying Devices	Knowledge and application	2 theoretical 4 + practical	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The Microscope	Knowledge and application	2 theoretical 4 +	Fifth

				practical	
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The Telescope	Knowledge and application	2 theoretical 4 + practical	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The Slit Lamp Biomicroscope	Knowledge and application	2 theoretical 4 + practical	Seventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Ophthalmoscopes	Knowledge and application	2 theoretical 4 + practical	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinoscopes and Refractometers	Knowledge and application	2 theoretical 4 + practical	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Lensmeters (Lens Analyzers)	Knowledge and application	2 theoretical 4 + practical	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Keratometry and Topography	Knowledge and application	2 theoretical 4 + practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Visual Field Analyzers (Perimetry Devices)	Knowledge and application	2 theoretical 4 + practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Advanced Imaging Devices	Knowledge and application	2 theoretical 4 + practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Calibration and Maintenance	Knowledge and application	2 theoretical 4 + practical	fourteenth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Review and Practical Demonstration	Knowledge and application	2 theoretical 4 + practical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-38

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

eye problems	Course name -1
OPT206	Course code -2
Second semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
45 hour of theory + 45 hours of practical work / 4 units 1	Number of credit hours (total) / Number of units (total) -6

M.M. Al-Jasser Mohammed Jassim	**Name of the course supervisor -7 mention all names, if there is more) (than one name**

Course objectives -8

Screening and identifying vision problems, diagnosing and treating common visual conditions such as refractive errors, providing prescriptions for eyeglasses and contact lenses, identifying and referring medical conditions to specialist ophthalmologists, and providing consultations and preventive .care for general eye health

Teaching and learning strategies -9

Incorporating visual materials such as tactile graphics, providing detailed verbal descriptions, using teaching techniques adapted to learners' needs, training in Braille skills and assistive technologies, and promoting a supportive learning environment that includes collaboration with specialists

. B. Course specific skill objectives

Develop students' skills in examining, diagnosing, and treating eye disorders, including measuring and correcting refractive errors such as myopia, hyperopia, and astigmatism , measuring and treating double vision, strabismus, and lazy eye, identifying conditions that require referral to ophthalmologists, prescribing and fitting prescription and contact lenses, and .educating patients about eye health

Teaching and learning methods

In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects
. Scientific visits and practical training in hospitals by specialized medical staff

Evaluation methods

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

C. Affective and value- based goals

First: In theaffective domain

1. Developing a sense of responsibility towards eye patients and their visual .and human needs
2. Promote empathy and compassion for patients, especially those suffering .from chronic diseases or partial/complete vision loss
3. Develop an appreciation for the importance of professional work in the field .of optics as a means of improving the quality of life of patients

Instill a commitment to continuous learning in the field of eye problems to .4
.keep pace with medical and technical developments
Appreciating the role of the integrated medical team and the importance of .5
.collaboration with ophthalmologists and other specialists in patient care
Second: In the valuedomain
Commitment to professional ethics in dealing with patients, including .1
.respect for privacy and confidentiality of information
Promote the value of honesty and integrity in diagnosis and .2
.recommendation of appropriate treatment or glasses/lenses
Adopting the principle of justice and equality in providing visual services to .3
.all segments of society without discrimination
Respecting patients' rights to make their own treatment decisions after a .4
.clear and adequate explanation of the problems and solutions
Encourage human values such as patience, kindness, and caring when .5
.dealing with difficult or complex situations

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

- Evaluation methods

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

D. General and transferable skills (other skills related to employability and
. (personal development
.D1 . Skills of cooperation and teamwork
.D2 . Computer typing skills
.D3 . English communication skills
.D4 . Skills of enduring work performance and solving problems
. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written	whiteboard, powerpoint slides,	Introduction to Ocular Diseases	Knowledge and	3 theoretical	the first

theoretical exams	hands-on experiments		applicati on	3 + practi cal	
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Anatomy Review & Diagnostic Tools	Knowle dge and applicati on	3 theore tical 3 + practi cal	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Refractive Errors and Ametropia	Knowle dge and applicati on	3 theore tical 3 + practi cal	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Conjunctival Diseases	Knowle dge and applicati on	3 theore tical 3 + practi cal	Fourth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Corneal Disorders	Knowle dge and applicati on	3 theore tical 3 + practi cal	Fifth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Scleral and Uveal Tract Disorders	Knowle dge and applicati on	3 theore tical 3 + practi cal	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Lens Disorders	Knowle dge and applicati on	3 theore tical 3 + practi cal	Sevent h
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Glaucoma	Knowle dge and applicati on	3 theore tical 3 + practi cal	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Diseases – Part 1	Knowle dge and applicati on	3 theore tical 3 + practi cal	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinal Diseases – Part 2	Knowle dge and applicati on	3 theore tical 3 + practi cal	tenth

Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Neuro-Ophthalmologic Disorders	Knowledge and application	3 theoretical 3 + practical	eleventh
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Pediatric Eye Problems	Knowledge and application	3 theoretical 3 + practical	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Ocular Trauma and Emergencies	Knowledge and application	3 theoretical 3 + practical	thirteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Systemic Diseases and the Eye	Knowledge and application	3 theoretical 3 + practical	fourteenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Revision & Case Discussions	Knowledge and application	3 theoretical 3 + practical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-39

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

refraction	Course name -1
OPT207	Course code -2
First semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4
In-person lectures	Available forms of attendance -5
theoretical hours + 45 practical hours / 3 30 units	Number of credit hours (total) / Number of units (total) -6
M.M. Haider Sobhi Fadel	Name of the course supervisor (than one name mention all names, if there is more) -7

Course objectives -8
Understanding the behavior and refraction of light in various media and materials, which enables the diagnosis and correction of refractive errors in the eye such as myopia and hyperopia, the design of optical lenses, cameras, and optical fibers, in addition to understanding natural .phenomena such as the formation of rainbows
Teaching and learning strategies -9
Active teaching and learning strategies that focus on visual learning can be .used And practical activities. These strategies include the use of graphs, diagrams, and physical models, employing computer simulations, and conducting practical experiments to understand the behavior of light. It is also recommended to encourage students to solve problems, collaborate in groups, engage in active discussion, and connect theoretical concepts to real-world .applications to enhance understanding and develop critical thinking
. B. Course specific skill objectives To enable students to understand the principles of refraction and their practical applications, including the ability to accurately diagnose, evaluate, and correct refractive errors by prescribing appropriate lenses, using specialized equipment efficiently, and educating patients about their visual .health, while applying professional ethics and adhering to punctuality
Teaching and learning methods
In-person education (scientific films and videos, Laboratories, summer and (professional training, and graduation projects **. Scientific visits and practical training in hospitals by specialized medical staff**
Evaluation methods
Daily tests, semester exams, final exams, weekly reports on the subject, seminars on the study subjects , discussions and conversations during the . lesson
C. Affective and value- based goals Developing the student's appreciation of natural phenomena, enhancing his passion for scientific research, and developing respect for ethical and scientific principles, such as accuracy in work and cooperation with others, leading to the formation of his own value system related to optical sciences and technologies in his life
(In-person lectures), summer and professional training, graduation projects, . field visits, and practical training in clinical subjects

- **Evaluation methods**

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

D. General and transferable skills (other skills related to employability and . (personal development
.D1 . Skills of cooperation and teamwork
.D2 . Computer typing skills
.D3 . English communication skills
.D4 . Skills of enduring work performance and solving problems
. D5 . Internet conversation skills

Course structure -10

Evaluation method	Teaching method	Unit name/topic	Required learning outcomes	watches	week
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Introduction to Refraction	Knowledge and application	2 theoretical 3 + practical	the first
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The Laws of Refraction	Knowledge and application	2 theoretical 3 + practical	the second
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Refraction Through Lenses	Knowledge and application	2 theoretical 3 + practical	the third
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	The Human Eye and Refractive Errors	Knowledge and application	2 theoretical 3 + practical	Fourth
Reports, oral and	whiteboard, powerpoint	Clinical Refraction – Subjective vs Objective	Knowledge and	2 theore	Fifth

written theoretical exams	slides, hands-on experiments		applicati on	tical 3 + practi cal	
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Retinoscopy – Principles and Techniques	Knowle dge and applicati on	2 theore tical 3 + practi cal	Sixth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Subjective Refraction – Step by Step	Knowle dge and applicati on	2 theore tical 3 + practi cal	Sevent h
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Astigmatism and its Correction	Knowle dge and applicati on	2 theore tical 3 + practi cal	The eighth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Midterm Revision and Assessment	Knowle dge and applicati on	2 theore tical 3 + practi cal	Ninth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Presbyopia and Near Addition	Knowle dge and applicati on	2 theore tical 3 + practi cal	tenth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Binocular Vision and Refraction	Knowle dge and applicati on	2 theore tical 3 + practi cal	elevent h
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Pediatric Refraction	Knowle dge and applicati on	2 theore tical 3 + practi cal	twelfth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Geriatric and Special Populations	Knowle dge and applicati on	2 theore tical 3 + practi cal	thirtee nth
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Common Errors and Troubleshooting	Knowle dge and applicati on	2 theore tical 3 +	fourtee nth

				practical	
Reports, oral and written theoretical exams	whiteboard, powerpoint slides, hands-on experiments	Final Review and Practical Exam	Knowledge and application	2 theoretical 3 + practical	fifteenth

Course Evaluation -11
Student activities and reports, oral and written theoretical and practical exams
-40

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

Course Description / Level Three

Laboratory safety	Course name -1
MTCD302	Course code -2
First semester 2025/2026	Semester/Year -3
2025/9/1	Date of preparation of the description -4