**T.C. MALTEPE UNIVERSITY FACULTY OF MEDICINE**

**UNDERGRADUATE PROGRAM   
2023-2024 ACADEMIC YEAR**

**EDUCATIONAL INFORMATION PACKAGE**

| **DERS BİLGİLERİ** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Course Name** | **Ophthalmology Internship** | | | | **Course Code** | **MED 506** |
| **Phase** | 5 | **Level of the Course** | Undergraduate | | **Language of the Course** | English |
| **Mode of Delivery** | Face to face, E-Learning , hybrid | | | | **Lesson Type** | Compulsory |
| **Practice/Laboratuary Site** | Maltepe University Medical Faculty Hospital, Department of Ophthalmology | | | | **Suggested Courses** | None |
| **Prerequisite** | 1. MED 100  2. MED 200  3. MED 300  4. All courses in Phase 4 | | | Concurrent Requirements:  None | | |

| **ECTS** | | | |
| --- | --- | --- | --- |
| **ECTS Credits** | **Theoretical Lecture Hours** | **Practical Hours** | **Course Duration** |
| 3 | 18 hours | 36 hours | 2 weeks |

| **COURSE COORDINATORS AND INSTRUCTORS** |
| --- |
| **Course coordinator, contact information and Office hours:**  Zeki Tunç, MD., Professor, Maltepe University, Faculty of Medicine,  Department of Ophthalmology  [zeki.tunc@maltepe.edu.tr](mailto:zeki.tunc@maltepe.edu.tr) Extension: 1022  **Office Hours:**  Tuesday, Thursday: 12:00-14:00   | **Instructors, contact information and Office hours:**  Çağatay Çağlar, MD., Professor, Maltepe University, Faculty of Medicine,  Department of Ophthalmology  [doktorcagatay@gmail.com](mailto:doktorcagatay@gmail.com) Extension: 1022  **Office Hours:**  Tuesday, Thursday: 15:00-16:00  Özlem Cam, MD., Assistant Professor, Maltepe Üniversity, Faculty of Medicine Department of Ophthalmology  [ozlem.cam@maltepe.edu.tr](mailto:ozlem.cam@maltepe.edu.tr%20)  Extension: 1024  **Office Hours:**  Tuesday, Thursday: 15:00-16:00 | | --- | |

| **GENERAL OBJECTIVE AND CATEGORY OF THE COURSE** |
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| Learning ophthalmological symptoms and signs, and gaining skills of diagnosis and treatments of ophthalmic disorders.   | **CATEGORY OF THE COURSE** | | | --- | --- | | 1. Basic vocational course | **X** | | 1. Specialization/field course |  | | 1. Support course |  | | 1. Transferable skills course |  | | 1. Humanities, Communication and Management Skills Courses |  | |

| **COURSE LEARNING OUTCOMES, SUB-SKILLS AND COMPETENCIES** |
| --- |
| **Students who comlete this course;**   | **No.** | **Learning Outcomes, Sub-Skills and Competencies** | **Educational Method** | **ME Method** | | --- | --- | --- | --- | | 1 | Able to list the principles of obtaining information from incoming patients regarding their complaints. | EM2,EM4, EM5 | ME1, ME3, ME4 | | 2 | Able to perform general ophthalmological examination. | EM2,EM4, EM5 | ME1, ME 3, ME4 | | 3 | Able to explain common eye diseases and their causes in all age groups, taking into account the interaction of the individual with his/her environment, | EM2, EM5 | ME1, ME2, ME3, ME4 | | 4 | Able to explain practices for protecting eye health, | EM2, EM5 | ME1, ME3, ME3, ME4 | | 5 | Knows and can explain common misconceptions about the eyes and visual pathways, | EM2, EM5 | ME1, ME2, ME3 | | 6 | Able to obtain medical history from patients and their relatives by applying communication principles, | EM2, EM5 | ME1, ME 3, ME4 | | 7 | Determine preliminary diagnoses as a result of patients' complaints, history and physical examination, | EM2, EM5 | ME1, ME 3, ME4 | | 8 | Can roughly determine the visual acuity of the patient, | EM2,EM4, EM5 | ME1, ME 3, ME4 | | 9 | Able to perform eye movements and direct/indirect pupillary light reflex examinations. | EM2, EM5 | ME1, ME 3, ME4 | | 10 | Able to examine the optic disc directly with the ophthalmoscope, | EM2, EM4, EM5 | ME1, ME 3, ME4 | | 11 | Able to distinguish between urgent and non-urgent patients as a result of their complaints, history and physical examination, | EM2, EM5 | ME1, ME 3, ME4 | | 12 | Able to plan and manage the treatment of some non-urgent eye diseases, | EM2, EM5 | ME1, ME 3, ME4 | | 13 | Able to make the necessary preliminary preparations before referral to a specialist in urgent eye diseases, | EM2, EM5 | ME1, ME2, ME3 | |

| Core Diseases/Clinical Problems | Learning level |
| --- | --- |
| Refractive disorders (myopia, hyperopia, astigmatism) | ÖnT,K |
| Cataract and lens diseases | ÖnT,K |
| Eyelid and oculoplastic diseases | A,ÖnT,K |
| Tear system diseases | ÖnT,K |
| Corneal disorders and dry eye disease | A,ÖnT |
| Conjunctivitis | A,ÖnT,T,TT,İ,K |
| Conjunctiva-sclera diseases | A,ÖnT |
| Acute red eye | A |
| Orbital diseases and ocular tumours | A,ÖnT,K |
| Uveitis and ocular Behcet’s | A,ÖnT |
| Strabismus, amblyopia and nystagmus | ÖnT |
| Optic nerve diseases and other neuroophthalmological diseases | A,ÖnT |
| Glaucoma | A,ÖnT |
| Diabetic retinopathy | ÖnT,K |
| Central retinal venous and arterial occlusions | ÖnT,K |
| Macular diseases | ÖnT |
| Retinal detachment and vitreous diseases | A,ÖnT |
| Ocular trauma | A,ÖnT,T,TT,İ |

| **GENERAL COMPETENCIES:** |
| --- |
| 1. Productive  2. Rational  3. Questioner  4. Entrepreneur  5. Creative  6. Complies with ethical rules  7. Respecting differences  8. Sensitive to social problems  9. Using native language effectively  10. Environmentally friendly  11. Using a foreign language effectively  12. Able to adapt to different situations and social roles  13. Able to work in a team  14. Uses time effectively  15. Able to think critically |

| **COURSE CONTENTS** |
| --- |
| 1- Epidemiology of corneal diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  2- Epidemiology of refractive errors, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  3- Indications, examination methods and follow-up of contact lenses  4- Epidemiology of lens diseases and cataracts, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  5- Eye emergencies, eye traumas, eyelid emergency diseases, orbital emergency diseases epidemiology, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  6- Eye emergencies, acute conjuntivitis, chemical injuries of the eye, emergency vision loss epidemiology, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  7- National eye screening program and diagnosis and treatment methods of pediatric eye diseases  8- Epidemiology of strabismus, amblyopia and nystagmus, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  9- Glaucoma epidemiology, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  10- Epidemiology of orbital diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  11- Anatomy of visual pathways and epidemiology of diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  12- Epidemiology of eyelid diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  13- Uveal structure, epidemiology of uveitis and sclera diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  14- Epidemiology of lacrimal system diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  15- Epidemiology of conjunctival diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  16- Epidemiology, risk factors, pathology, signs and symptoms, differential diagnosis, imaging methods, other diagnostic methods and treatment of optic neuropathies  17- Epidemiology of retinal vascular diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods  18- Epidemiology of retinal detachment and macular diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods |

| **COURSE TEXTBOOKS AND SUPPLEMENTARY READINGS** |
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| **COURSE TEXTBOOKS**  [Kanski's Clinical Ophthalmology, 9th Edition](https://www.nobelkitabevi.com.tr/goz-hastaliklari-/7815-kanski-s-clinical-ophthalmology-9th-edition-9780702077128.html)    **SUPPLEMENTARY READINGS**  Basic Ophthalmological Diseases, American Academy of Ophthalmology |

| **COURSE ASSESSMENT AND EVALUATION SYSTEM** |
| --- |
| | **Evaluation method** | **Percent grade** | | --- | --- | | **Clerkship Exam (Theoretical)** | **%40** | | **Structured Oral Exam** | **%50** | | **ICE (On-the-job evaluation)** | **%10** | | **OSCE (Structured Subjective Clinical Examination)** | **-** | | **Attendance** | **-** | | **Laboratory** | **-** | | **Clinical Practice** | **-** | | **Field study** | **-** | | **Lesson Specific Internship** (if there is) | **-** | | **Homework** | **-** | | **Presentation** | **-** | | **Project** | **-** | | **Seminar** |  | | **Problem Based Learning** | **-** | | **Others** | **-** | | **TOTAL** | **%100** |   **NOTES:**  Assessment and Evaluation System is organized according to T.C. Maltepe University Faculty of Medicine Education and Training Regulations |

| **ECTS STUDENT WORKLOAD TABLE** |
| --- |
| | **Activities** | **Number** | **Duration**  **(hours)** | **Total work load** | | --- | --- | --- | --- | | **Lectures** | **18** | **1** | **18** | | **Laboratory** | **-** | **-** | **-** | | **Practice** | **36** | **1** | **36** | | **Lesson specific internship** (if there is) | **-** | **-** | **-** | | **Field study** | **-** | **-** | **-** | | **Lesson study time out of class** (pre work, strengthen, etc) | **-** | **-** | **-** | | **Presentation / Preparing seminar** | **-** | **-** | **-** | | **Project** | **1** | **5** | **5** | | **Homework** | **1** | **5** | **5** | | **İnterval examinations** | **-** | **-** | **-** | | **Clerkship Examination** | **1** | **6** | **6** | | **Total Work Load** | | | **70** | |

| **RELATIONSHIP BETWEEN MED 513 OPHTHALMOLOGY COURSE LEARNING OUTCOMES AND MEDICAL EDUCATION PROGRAMME KEY LEARNING OUTCOMES** |
| --- |
| | **No** | **Program Competencies/ Outcomes** | **Level of Contribution [[1]](#footnote-0)\*** | | | | | | --- | --- | --- | --- | --- | --- | --- | | **1** | **2** | **3** | **4** | **5** | | **1** | Able to explain the normal structure and functions of the organism. |  | **X** |  |  |  | | **2** | Able to explain the pathogenesis, clinical and diagnostic features of psychiatric disorders |  |  |  | **X** |  | | **3** | Able to take history and perform mental status examination. |  |  |  |  | **X** | | **4** | Able to perform first step interventions and refer and transfer cases in life threatening emergency situations. |  |  |  |  | **X** | | **5** | Able to perform necessary basic medical interventions for the diahnosis and treatment of mental |  |  |  |  | **X** | | **6** | Able to perform preventive measures and forensic practices. |  |  | **X** |  |  | | **7** | Having sufficient knowledge about the structure and process of the National Health System. |  |  | **X** |  |  | | **8** | Able to define legal responsibilities and ethical principles. |  | **X** |  |  |  | | **9** | Able to perform first step care of most prevalent disorders in the community with effective evidence based medical methods. |  | **X** |  |  |  | | **10** | Able to organize and implement scientific meetings and projects |  |  | **X** |  |  | | **11** | Able to use a major foreign language sufficient enough for follow up of literature and update of medical knowledge; able to use computer and statistical skills for the evaluation of scientific studies. |  | **X** |  |  |  | |

| **DÖNEM 5 TIP 513 GÖZ STAJI DERS LİSTESİ VE SIRALAMASI** |
| --- |
| | **No** | **Course/competency** | **Instructor** | | --- | --- | --- | | 1 | Corneal Anatomy and Diseases | Zeki Tunç, MD, Prof. | | 2 | Refraction Disorders and Their Treatment | Zeki Tunç, MD, Prof. | | 3 | Contact Lenses | Zeki Tunç, MD, Prof. | | 4 | Lens Diseases and Cataracts | Çağatay Çağlar, MD, Prof. | | 5 | Ocular Emergencies 1 | Çağatay Çağlar, MD, Prof. | | 6 | Ocular Emergencies 2 | Çağatay Çağlar, MD, Prof. | | 7 | National Eye Screening Program | Çağatay Çağlar, MD, Prof. | | 8 | Strabismus, Amblyopia and Nystagmus | Çağatay Çağlar, MD, Prof. | | 9 | Glaucoma and its Treatment | Çağatay Çağlar, MD, Prof. | | 10 | Orbital Diseases | Çağatay Çağlar, MD, Prof. | | 11 | Vision Pathway and Diseases | Çağatay Çağlar, MD, Prof. | | 12 | Uveitis and Scleral Diseases | Özlem Cam, MD, Assist.Prof. | | 13 | Lacrimal System and Diseases | Özlem Cam, MD, Assist.Prof. | | 14 | Retina and Diseases 1 | Özlem Cam, MD, Assist.Prof. | | 15 | Retina and Diseases 2 | Özlem Cam, MD, Assist.Prof. | | 16 | Optic Neuropathies | Özlem Cam, MD, Assist.Prof. | | 17 | Eyelids and Their Diseases | Özlem Cam, MD, Assist.Prof. | | 18 | Conjunctiva and its Diseases | Özlem Cam, MD, Assist.Prof. | |

| **Phase 5 MED 513 Ophthalmology Internship Course Programme** | | | | | |
| --- | --- | --- | --- | --- | --- |
| First Week | | | | | |
| Days | Monday | Tuesday | Wednesday | Thursday | Friday |
| 9.00-10.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery |
| 10.30-11.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery |
| 11.30-12.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery |
| 12.30-13.30 | Lunch | Lunch | Lunch | Lunch | Lunch |
| 13.30-14.30 | LESSON: Uveitis and Scleral Diseases | LESSON: Cataract and its Treatment | LESSON: Retina and Diseases 1 | LESSON: Strabismus, Amblyopia and Nystagmus | Polyclinic/Surgery |
| 14.30-15.30 | LESSON: Lacrimal System and Diseases | LESSON: Glaucoma and its Treatment | LESSON: Retina and Diseases 2 | LESSON: National Eye Screening Program | Polyclinic/Surgery |
| 15.30-16.30 | LESSON: Optic Neuropathies | LESSON: Orbital Diseases | Polyclinic/Surgery | LESSON: Visual Pathway and its Diseases | Polyclinic/Surgery |
|  |  |  |  |  |  |
|  | | | | | |
| Second Week | | | | | |
| 9.30-10.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | EXAM/TEST |
| 10.30-11.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | EXAM/TEST |
| 11.30-12.30 | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | Polyclinic/Surgery | EXAM/TEST |
| 12.30-13.30 | Lunch | Lunch | Lunch | Lunch | Lunch |
| 13.30-14.30 | LESSON: Eyelid and Diseases | LESSON: Ocular Emergencies 1 | LESSON: Cornea Anatomy and Diseases | Polyclinic/Surgery | EXAM/ORAL |
| 14.30-15.30 | LESSON: Conjunctiva and its Diseases | LESSON: Ocular Emergencies 2 | LESSON: Refraction Defects and Their Treatment | Polyclinic/Surgery | EXAM/ORAL |
| 15.30-16.30 | Polyclinic/Surgery | Polyclinic/Surgery | LESSON: Contact Lenses | Polyclinic/Surgery | EXAM/ORAL |
|  |  |  |  |  |  |

| | **EDUCATIONAL METHODS GUIDE** | | | | --- | --- | --- | | **CODE** | **METHOD NAME** | **EXPLANATION** | | **EM1** | Amphitheatre lesson | These are the courses applied in preclinical education where the whole class is together. | | **EM2** | Class lesson | These are courses applied in small groups during the clinical period. | | **EM3** | Lab application | These are laboratory courses applied in the preclinical period. | | **EM4** | Skill Training App | It is the work that the student does on a model or mannequin before meeting with the real patient, which will be done in the Virtual Clinic or other environment. | | **EM5** | Clinic Education | These are activities that provide clinical competence by applying bedside training with real patients or models under the supervision of trainers. | | **EM6** | Independent Study Hours | These are the periods in the curriculum for the student to repeat what they have learned and to prepare for new lesson sessions. | | **EM7** | Community Based Education Application | Field practices, non-unit professional practices, etc. includes. | | **EM8** | Problem Based Learning | Problem based learning. | | **EM9** | Private Study module | These are applications that will enable the student to gain in-depth knowledge about a subject individually or as a group. | | **EM10** | Scientific Research study | These are applications aimed at improving the scientific research competence of the student. | | | **MEASUREMENT EVALUATION METHODS GUIDE** | | | | --- | --- | --- | | **CODE** | **METHOD NAME** | **EXPLANATION** | | **ME1** | Theoretical Exam ( Multiple Elective , Multiple Optional etc Questions containing ) | The committee is the exam used in the final exams. | | **ME2** | Practical exam | It should be used for laboratory applications. | | **ME3** | Classical Verbal |  | | **ME4** | Structured Oral | It is an oral exam in which questions and answers are prepared on a form beforehand. | | **ME5** | OSCE | Objective Structured Clinical Examination | | **ME6** | CORE | Clinical Act Execution Exam | | **ME7** | ICE ( Business head Evaluation ) | It is the evaluation made by the trainer on the student at the bedside or during the practice. | | **ME8** | Other | A statement must be made. | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

1. \*1 lowest, 2 low, 3 fair, 4 high, 5 highest. [↑](#footnote-ref-0)