**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 2003. MED 3004. All courses in Phase 4 | Concurrent Requirements:None |

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

| **COURSE COORDINATORS AND INSTRUCTORS** |
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| **Course coordinator, contact information and Office hours:**Zeki Tunç, MD., Professor, Maltepe University, Faculty of Medicine, Department of Ophthalmologyzeki.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 Ophthalmologydoktorcagatay@gmail.com Extension: 1022**Office Hours:** Tuesday, Thursday: 15:00-16:00Özlem Cam, MD., Assistant Professor, Maltepe Üniversity, Faculty of Medicine Department of Ophthalmologyozlem.cam@maltepe.edu.tr  Extension: 1024**Office Hours:** Tuesday, Thursday: 15:00-16:00 |
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| **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** |
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| 1. Basic vocational course
 | **X** |
| 1. Specialization/field course
 |  |
| 1. Support course
 |  |
| 1. Transferable skills course
 |  |
| 1. Humanities, Communication and Management Skills Courses
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| **COURSE LEARNING OUTCOMES, SUB-SKILLS AND COMPETENCIES** |
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| **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 |

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| 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:** |
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| 1. Productive2. Rational3. Questioner4. Entrepreneur5. Creative6. Complies with ethical rules7. Respecting differences8. Sensitive to social problems9. Using native language effectively10. Environmentally friendly11. Using a foreign language effectively12. Able to adapt to different situations and social roles13. Able to work in a team14. Uses time effectively15. Able to think critically |

| **COURSE CONTENTS** |
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| 1- Epidemiology of corneal diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods2- Epidemiology of refractive errors, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods3- Indications, examination methods and follow-up of contact lenses4- 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 methods5- 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 methods6- 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 methods7- National eye screening program and diagnosis and treatment methods of pediatric eye diseases8- 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 methods9- Glaucoma epidemiology, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods10- Epidemiology of orbital diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods11- 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 methods12- Epidemiology of eyelid diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods13- 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 methods14- Epidemiology of lacrimal system diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods15- Epidemiology of conjunctival diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods16- Epidemiology, risk factors, pathology, signs and symptoms, differential diagnosis, imaging methods, other diagnostic methods and treatment of optic neuropathies17- Epidemiology of retinal vascular diseases, formation mechanisms, types, signs and symptoms, diagnostic methods, emergency medical treatment methods, medical/surgical treatment methods, surgical/laser treatment methods18- 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** |
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| **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** |
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| **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** |

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| **RELATIONSHIP BETWEEN MED 513 OPHTHALMOLOGY COURSE LEARNING OUTCOMES AND MEDICAL EDUCATION PROGRAMME KEY LEARNING OUTCOMES** |
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| **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** |  |  |  |

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| **DÖNEM 5 TIP 513 GÖZ STAJI DERS LİSTESİ VE SIRALAMASI** |
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| **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. |

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| **Phase 5 MED 513 Ophthalmology Internship Course Programme** |
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| 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 |
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| **EDUCATIONAL METHODS GUIDE** |
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| **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. |

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| **MEASUREMENT EVALUATION METHODS GUIDE** |
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| **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. |

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