COURSE INFORMATON					
Course Title	Code	Semester	COURSE INFORMATION Lecture+Practice+Labrotory Hour	Credits	ECTS
OPHTHALMOLOGY (Clinical Clerkship)	MED 502	5/9-10	28+52	5	5*

^{*} ECTS credits are the university credits of the courses in Yeditepe University, Faculty of Medicine, Undergraduate Medical Education Program

Prerequisites	The student that joins this course, should have at least the Phase 4	
ricicquisites	knowledge level in medical faculty.	

Language of Instruction	English
Course Level	Second-cycle higher education (i.e. QF-EHEA-2, EQF-LLL-7, TYYÇ-7) with Master's Degree/ "Regulated Professions" legislation by EU 2005/36/EC Directive
Course Type	Compulsory
Course Coordinator	Vildan Öztürk
Instructors	Sinan Tatlıpınar, Belkıs İlgaz Yalvaç, Raciha Beril Küçümen, İlke Bahçeci Şimşek, Vildan Öztürk, Alp Kayıran
Assistants	Can Şirolu
Goals	To convey necessary knowledge on pathology, symptomatology, clinics and pharmacology of eye diseases, to equip with skills and attitudes required for an appropriate approach to management of eye patients
	For further details please see Academic Program Book of Phase V at http://med.yeditepe.edu.tr/sites/default/files/phase 5 0.pdf

Week 1

		Day 1	Day 2	Day 3	Day 4	Day 5
	09.00 - 09.50	Introductory Session (Introduction to Ophthalmology)	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)
	10.00 - 11.20	Lecture Anatomy Alp Kayıran		Lecture Methods of Examinatio n Vildan Öztürk		
Content	11.30 - 12.00	Clinical experience	Student Group Study	Student Group Study	Student Group Study	Student Group Study
	12.00 - 12.50	Lunch	Lunch	Lunch	Lunch	Lunch
	13.00 - 13.50	Clinical Experience (Outpatient)	Lecture Refractive Errors Alp Kayıran	Lecture Conjunctiva Vildan Öztürk	Lecture Cornea Alp Kayıran	Lecture Tear Film and Lacrimal Apparatus İlke Şimşek
	14.00 - 14.50 15.00 - 15.50		Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)

16.00					
-	Independent	Independen	Independen	Independen	Independen
16.50	Learning	t Learning	t Learning	t Learning	t Learning
17.00					
-					
17.50					

Week 2

Week 2						
	Day 6	Day 7	Day 8	Day 9	Day 10	
09.00 - 09.50			Clinical Experience (Outpatient) Case Based Learning			
10.50	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Red Eye Vildan Öztürk	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	
11.00 - 11.20			CBL Eye emergency Vildan Öztürk			
11.30 - 12.00	Student Group Study	Student Group Study	Student Group Study	Student Group Study	Student Group Study	
12.00 - 12.50	Lunch	Lunch	Lunch	Lunch	Lunch	
13.00 - 13.50	Lecture Glaucoma B. Ilgaz Yalvaç	Lecture Retinal Detachment and IntraocularTumour S Sinan Tatlıpınar	Lecture Contact Lens and Refractive Surgery Vildan Öztürk	Lecture Diseases of the Lens B. Ilgaz Yalvaç	Lecture Uveal Tract Alp Kayıran	
14.00 - 14.50	Lecture ³ Lids and Orbit İlke Şimşek	Lecture ³ Retinal Vascular Diseases Sinan Tatlıpınar	Clinical	Lecture Ocular Manifestations of SystemicDisease s Alp Kayıran	Clinical	
15.00 - 15.50	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Experience (Outpatient)	Clinical Experience1 (Outpatient)	Experience (Outpatient)	
16.00 - 16.50 17.00 - 17.50	Independen t Learning	Independent Learning	Independen t Learning	Independent Learning	Independen t Learning	

Week3

	Day 11	Day 12	Day 13	Day 14	Day 15
09.00 - 09.S0			Clinical Experience (Outpatient)		Independent Learning
10.00 - 10.S0	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)		Clinical Experience (Outpatient)	
11.00 - 11.20			Lecture Pediatric Ophthalmolog Y İlke Şimşek		Assessment Session Written Exam
11.30 - 12.00	Student Group Study	Student Group Study	Student Group Study	Student Group Study	Exam
12.00 - 12.50	Lecture Macular Degeneratio n and Hereditary Retinal Dystrophies Sinan Tatlıpınar	Lecture Neuro- Ophthalmolog y B. Ilgaz Yalvaç	Clinical Experience (Outpatient)	Clinical Experience (Outpatient)	Lunch
13.00 - 13.50	Lunch	Lunch	Lunch	Lunch	Assessment
	Lecture				Session Oral

14.00 - 14.S0	Strabismus İlke Şİmşek	Clinical Experience		Clinical Experience	Exam	
15.00 - 15.50	Clinical Experience (Outpatient)	(Outpatient)	Clinical Experience (Outpatient)	(Outpatient)	Program Evaluation Session	
16.00 - 16.50	Independent	Independent	Independent	Independen	Review of the Exam Questions, Evaluation of the Program	
17.00 - 17.50	Learning	Learning	Learning	t Learning	(Ophthalmologis t in charge)	

Learning Outcomes	Programme Learning Outcomes	Teaching Methods	Assessmen t Methods
Describe anatomy of eye and appendaxes and orbit,	1,1,3	1,2,3	A, C
Classify refractive errors and different methods of treatment	1,1,3	1,2,3	A, C
3. Describe physiologies and pathologies of the cornea, conjunctiva, lacrimal system, eyelids and the orbit, explain mechanisms of occurrence, signs and symptoms, methods of examination and ancillary tests, and treatment options of these pathologies.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3,12	A, C
4. State signs and symptoms of different lenticular diseases including cataracts, indications and methods of surgical treatments.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3	A, C
5. Explain pathophysiology, diagnostic and treatment methods and pharmacology of various glaucoma types	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3,12	A, C
6. Classify uveitic syndromes with respect to affected anatomical sites, signs and symptoms and describe different treatment options	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3,12	A, C
7. Describe mechanisms of occurrence, signs and symptoms, methods of examination and ancillary tests, and treatment options of vascular and age related diseases of retina,	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3	A, C
8. Explain pathophysiology, risk factors, signs and symptoms, preventive measures and different treatment methods of retinal detachment,	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3	A, C
9. Describe signs, symptoms and examination methods of neuroophthalmological diseases, interpret relationship with neurological diseases and anatomical locations of lesions.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3	A, C
10. Explain signs, symptoms and examination methods of pediatric ophthalmological diseases and strabismus types and classify the treatment options.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12	1,2,3	A, C
11. Describe signs, symptoms, examination methods recognize differential diagnosis and classify the treatment options of red eye diseases.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,7 - 1,1,8 - 1,1,9 - 1, 1,10 - 1,1,12	1,2,3,12	A, C

12. Describe signs, symptoms, examination methods of eye trauma and emergency, recognize differential diagnosis and classify treatment options depending on the urgency.	1,1,1 - 1,1,2 - 1,1,3 - 1,1,4 - 1,1,6 - 1,1,12 - 2,5,1 - 2,5,4	1,2,3,12	A, C
13. Interpret ocular manifestations of systemic diseases.	1,1,1 - 1,1,3 - 1,4,1	1,2,3	A, C
14. Outlines methods of examination in ophthalmology.	1,1,7 - 1,1,8	1,2,3	A, C

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 9: Simulation, 12: Case Study
Assessment Methods:	A: Testing B: Presentation C: Homework

	COURSE CONTENT	
WEEK 1	SUBJECT	Study Materials
1	Introductory Session	Materials for the course provided by instructor
1	Lecture	
	Anatomy	Materials for the course provided by instructor
1	Lecture	Materials for the course
	Refractive Errors	provided by instructor
1	Lecture	Materials for the course
	Methods of Examination	provided by instructor
1	Lecture	Materials for the course
	Conjunctiva	provided by instructor
1	Lecture	Materials for the course
	Cornea	provided by instructor
1	Lecture	Materials for the course
	Tear Film and Lacrimal Apparatus	provided by instructor
WEEK 2	SUBJECT	
1	Lecture	Materials for the course
	Glaucoma	provided by instructor
1	Lecture	Materials for the course
	Lids and Orbit	provided by instructor
1	Lecture	Materials for the course
	Retinal Detachment and Intraocular Tumours	provided by instructor
1	Lecture	Materials for the course
	Retinal Vascular Diseases	provided by instructor
1	Lecture	Materials for the course
	CBL Red Eye	provided by instructor

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1	Lecture	Materials for the course
	CBL Trauma and Emergency in Ophthalmology	provided by instructor
1	Lecture	Materials for the course
	Contact Lens and Refractive Surgery	provided by instructor
1	Lecture	Materials for the course
	Diseases of the lens	provided by instructor
1	Lecture	Materials for the course
	Ocular Manifestations of Systemic Diseases	provided by instructor
1	Lecture	Materials for the course
	Uveal Tract	provided by instructor
WEEK	SUBJECT	
3		
1	Lecture	Materials for the course
	Macular Degeneration and Hereditary Retinal	provided by instructor
	Dystrophies	
1	Lecture	Materials for the course
	Strabismus	provided by instructor
1	Lecture	Materials for the course
	Neuro – Ophthalmology	provided by instructor
1	Lecture	Materials for the course
	Pediatric ophthalmology	provided by instructor
		Materials for the course
3	Assessment Session	provided by the
	Program Evaluation Session	instructor Materials for the course
3	Review of the Exam Questions,	provided by the
	Evaluation of the Program	instructor

RECOMMENDED SOURCES

- Ophthalmology: A Short Textbook by J. Amann, Gerhard K.
- Wills Eye Manual The Wills Eye Manual: Office and Emergency Room
 Diagnosis and Treatment of Eye Disease, by Nika Bagheri MD, Brynn Wajda
 MD, Charles Calvo MD, Alia Durrani MD

Textbook

- MEEI Manual of Ophthalmology by Peter K. Kaiser MD, Neil J. Friedman MD, Roberta Pineda MD
- Basic Ophthalmology: Essentials for Medical Students, 10th ed.
- Lang, Atlas Ophthalmology PDF

• http://www.icoph.org/dynamic/attachments/resources/icoemergencyhandbo ok2010 1.pdf

- https://timroot.com/ophthobook/
- https://www.atlasophthalmology.net/
- https://eyewiki.org/Main Page

Additional Resources

- https://www.columbiaeye.org/eye-library
- http://webeye.ophth.uiowa.edu/eyeforum/
- https://eyeguru.org/
- http://www.meduniwien.ac.at/augen/englisch/steps.htm#
- www.retinapodcast.com
- www.eyes4ears.com
- Lecture notes

MATERIAL SHARING

Documents	Via google classroom
Assignments	Student ppt presentations
Exams	Not shared

ASSESSMENT					
Questions Types (Pencil-PaperTests)	Proportion (in Pencil-Paper Tests)				
Multiple Choice Questions	80%				
Extended Matching Questions	10%				
Key Feature Questions	10%				
Total	100 %				
Other Assessment Methods and Tools	Proportion				
	(in Pass/Fail Decision)				
Structured Oral Exam (SOE)	35%				
Objective Structured Clinical Exam (OSCE)	10% 5%				
Case Based Learning (CBL quiz)	5%				
uiz					
Total	50 %				
Pass/Fail Decision	Proportion				
	(in Pass/Fail Decision)				
Pencil-Paper Tests	50%				
Other Assessments Methods and Tools	50%				

COURSE CATEGORY	Expertise/Field Courses

COURSE'S CONTRIBUTION TO PROGRAMME							
No	Program Learning Outcomes	Contribution					
		1	2	3	4	5	
1.	Basic Professional Competencies						

1.1.	Clinical Competencies	X
1.2.	Competencies Related to Communication	X
1.3.	Competencies Related to Leadership and Management	X
1.4.	Competencies Related to Health Advocacy	X
1.5.	Competencies Related to Research	X
1.6.	Competencies Related to Health Education and Counseling	X
2.	Professional Values and Perspectives	
2.1.	Competencies Related to Law and Legal Regulations	X
2.2.	Competencies Related to Ethical Aspects of Medicine	X
2.3.	Competencies Related to Social and Behavioral Sciences	X
2.4.	Competencies Related to Social Awareness and Participation	X
2.5.	Competencies Related to Professional Attitudes and Behaviors	X
3.	Personal Development and Values	
3.1	Competencies Related to Lifelong Learning	X
3.2.	Competencies Related to Career Management	X
3.3.	Competencies Related to Protection and Development of Own Physical and Mental Health	X

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION						
Activities	Quantity or day	Duration (Hour)	Total Workload (Hour)			
Course Duration (3 weeks)	15	5.5	82.5			
Hours for off-the-classroom study (Pre-study, practice, review/week)	15	4	60			
Homework	1	2	2			
Exam	2	2	4			
Total Work Loa	148.5					
Total Work Load / 30 (h	4.95					
ECTS Credit of the Cours	5					