

Competency Mapping Chart

Competency Code	COMPETENCY The student should be able to	Page No.
Visual Acuity Assessment		
OP1.1	Describe the physiology of vision	15
OP1.2	Define, classify, and describe the types and methods of correcting refractive errors	45, 718
OP1.3	Demonstrate the steps in performing the visual acuity assessment for distance vision, near vision, color vision, the pin hole test, and the menace and blink reflexes	22
OP1.4	Enumerate the indications and describe the principles of refractive surgery	59, 659, 680
OP1.5	Define and enumerate the types and the mechanism by which strabismus leads to amblyopia	467
Lids and Adnexa, Orbit		
OP2.1	Enumerate the causes; describe and discuss the etiology, clinical presentations, and diagnostic features of common conditions of the lid and adnexa including Hordeolum externum/internum, blepharitis, preseptal cellulitis, dacryocystitis, hemangioma, dermoid, ptosis, entropion, lid lag, and lagophthalmos	481, 519, 522, 524, 526, 532, 535, 539, 558, 574
OP2.2	Demonstrate the symptoms and clinical signs of conditions enumerated in OP2.1	481, 519, 522, 524, 526, 532, 535, 539
OP2.3	Demonstrate under supervision clinical procedures performed in the lid including: Bell's phenomenon, assessment of entropion/ectropion, regurgitation test of lacrimal sac, massage technique in congenital dacryocystitis, and trichiatic cilia removal by epilation	553
OP2.4	Describe the etiology and clinical presentation; discuss the complications and management of orbital cellulitis	574
OP2.5	Describe the clinical features on ocular examination and management of a patient with cavernous sinus thrombosis	578
OP2.6	Enumerate the causes and describe the differentiating features, clinical features, and management of proptosis	570, 578
OP2.7	Classify the various types of orbital tumors; differentiate the symptoms and signs of the presentation of various types of ocular tumors	564, 569, 582
OP2.8	List the investigations helpful in diagnosis of orbital tumors; enumerate the indications for appropriate referral	569, 582
Conjunctiva		
OP3.1	Elicit document and present an appropriate history in a patient presenting with a "red eye" including congestion, discharge, and pain	85, 187
OP3.2	Demonstrate document and present the correct method of examination of a "red eye" including vision assessment, corneal luster, pupil abnormality, and ciliary tenderness	85
OP3.3	Describe the etiology, pathophysiology, ocular features, differential diagnosis, complications, and management of various causes of conjunctivitis	89

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OP3.4	Describe the etiology, pathophysiology, ocular features, differential diagnosis, complications, and management of trachoma	98
OP3.5	Describe the etiology, pathophysiology, ocular features, differential diagnosis, complications, and management of vernal catarrh	108
OP3.6	Describe the etiology, pathophysiology, ocular features, differential diagnosis, complications, and management of pterygium	115
OP3.7	Describe the etiology, pathophysiology, ocular features, differential diagnosis, complications, and management of symblepharon	536
OP3.8	Demonstrate correct technique of removal of foreign body from the eye in a simulated environment	499
OP3.9	Demonstrate the correct technique of instillation of eye drops in a simulated environment	Practical
Corneas		
OP4.1	Enumerate, describe, and discuss the types and causes of corneal ulceration	127
OP4.2	Enumerate and discuss the differential diagnosis of infective keratitis	127
OP4.3	Enumerate the causes of corneal edema	121
OP4.4	Enumerate the causes and discuss the management of dry eye	559
OP4.5	Enumerate the causes of corneal blindness	115, 121, 122, 123, 156, 161
OP4.6	Enumerate the indications and the types of keratoplasty	676
OP4.7	Enumerate the indications and describe the methods of tarsorrhaphy	140, 143, 151, 153, 536, 539, 563, 607
OP4.8	Demonstrate technique of removal of foreign body in the cornea in a simulated environment	499
OP4.9	Describe and discuss the importance and protocols of eye donation and eye banking	676, 706
OP4.10	Counsel patients and family about eye donation in a simulated environment	Practical
Sclera		
OP5.1	Define, enumerate, and describe the etiology, associated systemic conditions, clinical features, complications, indications for referral, and management of episcleritis	165
OP5.2	Define, enumerate, and describe the etiology, associated systemic conditions, clinical features, complications, indications for referral, and management of scleritis	167
Iris and Anterior Chamber		
OP6.1	Describe clinical signs of intraocular inflammation and enumerate the features that distinguish granulomatous from nongranulomatous inflammation; identify acute iridocyclitis from chronic condition	177, 180
OP6.2	Identify and distinguish acute iridocyclitis from chronic iridocyclitis	177, 180
OP6.3	Enumerate systemic conditions that can present as iridocyclitis and describe their ocular manifestations	177, 180
OP6.4	Describe and distinguish hyphema and hypopyon	183, 505

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OP6.5	Describe and discuss the angle of the anterior chamber and its clinical correlates	2
OP6.6	Identify and demonstrate the clinical features, and distinguish and diagnose common clinical conditions affecting the anterior chamber	180, 265, 288, 292, 293, 298, 311, 716
OP6.7	Enumerate and discuss the etiology and the clinical distinguishing features of various glaucomas associated with shallow and deep anterior chamber; choose appropriate investigations and treatment for patients with above conditions	265, 288, 292, 293, 298, 311
OP6.8	Enumerate and choose the appropriate investigation for patients with conditions affecting the uvea	177, 180
OP6.9	Choose the correct local and systemic therapy for conditions of the anterior chamber and enumerate their indications, adverse events, and interactions	187
OP6.10	Counsel patients with conditions of the iris and anterior chamber about their diagnosis, therapy, and prognosis in an empathetic manner in a simulated environment	Practical
Lens		
OP7.1	Describe the surgical anatomy and the metabolism of the lens	218, 223
OP7.2	Describe and discuss the etiopathogenesis, stages of maturation, and complications of cataract	229, 230, 231, 235, 241
OP7.3	Demonstrate the correct technique of ocular examination in a patient with a cataract	233, 244
OP7.4	Enumerate the types of cataract surgery and describe the steps, and intraoperative and postoperative complications of extracapsular cataract extraction surgery	244, 686, 694
OP7.5	To participate in the team for cataract surgery	Practical
OP7.6	Administer informed consent and counsel patients for cataract surgery in a simulated environment	Practical
Retina and Optic Nerve		
OP8.1	Discuss the etiology, pathology, clinical features, and management of vascular occlusions of the retina	339, 341, 346, 351, 372, 375, 377, 378, 386
OP8.2	Enumerate the indications for laser therapy in the treatment of retinal diseases (including retinal detachment, retinal degenerations, diabetic retinopathy, and hypertensive retinopathy)	337, 339, 341, 346, 351, 372, 375, 377, 378, 386
OP8.3	Demonstrate the correct technique of fundus examination, and describe and distinguish the funduscopic features in a normal condition and in conditions causing an abnormal retinal examination	725
OP8.4	Enumerate and discuss treatment modalities in management of diseases of the retina	339, 341, 346, 351, 372, 375, 377, 378, 386, 701
OP8.5	Describe and discuss the correlative anatomy, etiology, clinical manifestations, diagnostic tests, imaging, and management of diseases of the optic nerve and visual pathway	392, 394, 395, 403, 411, 415

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Miscellaneous		
OP9.1	Demonstrate the correct technique to examine extraocular movements (uniocular and binocular)	439
OP9.2	Classify, enumerate the types, methods of diagnosis, and indications for referral in a patient with heterotropia/strabismus	450, 452, 459
OP9.3	Describe the role of refractive error correction in a patient with headache and enumerate the indications for referral	45, 59, 450, 451, 453, 631
OP9.4	Enumerate, describe, and discuss the causes of avoidable blindness and the National Programme for Control of Blindness (including Vision 2020)	728, 729, 730, 731, 734
OP9.5	Describe the evaluation and enumerate the steps involved in the stabilization, initial management, and indication for referral in a patient with ocular injury	495
Integration		
Human Anatomy		
AN30.5	Explain effect of pituitary tumors on visual pathway	421
AN31.3	Describe anatomical basis of Horner's syndrome	593
AN31.5	Explain the anatomical basis of oculomotor, trochlear, and abducent nerve palsies along with strabismus	596, 597, 598
AN41.1	Describe and demonstrate parts and layers of eyeball	1
AN41.2	Describe the anatomical aspects of cataract, glaucoma, and central retinal artery occlusion	257
Physiology		
PY10.17	Describe and discuss functional anatomy of eye, physiology of image formation, physiology of vision including color vision, refractive errors, color blindness, physiology of pupil, and light reflex	15, 213, 257, 259
PY10.18	Describe and discuss the physiological basis of lesion in visual pathway	424
PY10.19	Describe and discuss auditory and visual evoked potentials	15
PY10.20	Demonstrate testing of visual acuity, color, and field of vision in volunteer/ simulated environment	15
Pathology		
PA36.1	Describe the etiology, genetics, pathogenesis, pathology, presentation, sequelae, and complications of retinoblastoma	491
Pharmacology		
PH1.58	Describe drugs used in ocular disorders	60, 280
General Medicine		
IM24.15	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of vision, and visual loss in the elderly	57, 154, 235, 372, 733