

# STUDY GUIDE

## Ophthalmology Module

1202421



**CREDIT HOURS: 3**

**4<sup>th</sup>. YEAR MBBS (1444 - 45) (2022 - 23)**

## Program MBBS

### Mission:

Preparing physicians characterized by cognitive, clinical and research competencies to provide health services that enhance community health locally and regionally.

### Goals:

- Graduating distinguished physicians with professionalism and research skills.
- Enhance the practice of leadership and effective communication.
- Teach students teamwork skills and continuous self-learning.
- Improving the quality of health services and community partnership regionally.
- Encouraging scientific medical researches.

### Course coordinators

Dr. Mujeeb Ur Rehman Parrey (Mujeeb.Parrey@nbu.edu.sa)

#### Course Identification

1. Credit hours	3
2. Level/year at which this course is offered	Level 12/ 4th. Year
3. Pre-requisites for this course	Pass 2nd. and 3rd. year

#### Course committee members

No	Contribution	Name	Email ID
1.	Supervisor Curriculum Committee and HOD	Dr. Majed Alrowaili	drfmajed@yahoo.com
2.	Module Coordinator	Dr. Mujeeb Ur Rehman	drparrey@gmail.com



3.	<b>Lecturer</b>	Dr. Maha Abdullatif	maha.m.latif79@gmail.com
4.	<b>Coordinator Surgery Dept.</b>	Dr. Yasir Mehmood	dr.yasir@live.co.uk



## Actual Learning Hours

No	Activity	Learning Hours
<b>Contact Hours</b>		
1	Lecture	10
2	Tutorial	14
3	CP	7
4	PBL	2
5	Seminar	8
6	Skill Lab	4
	<b>Total</b>	<b>45</b>
<b>*Other Learning Hours</b>		
1	Study	50
2	Assignments	10
3	Library	15
4	Projects/Research Essays/Theses	
5	Others(specify)	
	<b>Total</b>	<b>120</b>

\*

## A. Course Objectives and Learning Outcomes

### B. Course Learning Outcomes

#### A. Course Objectives and Learning Outcomes

##### 1. Course Description

It is a course for teaching basic skills of ophthalmology with specific teaching methodology which include lectures, tutorials, problem based learning scenarios, case presentations, seminars, skills lab., clinical rounds and OR (operation room) teaching sessions in the hospital to master history taking and physical examination techniques. The course runs for 3 weeks to complete 45 contact hours (3 credit hours) and the students are assessed using written, SL, PBL, CP, OSPE and ORAL examinations.

##### 2. Course Main Objective

###### 1. On completion of this (course/module) the students should be able to :

- List causes of common eye diseases in adults and children. Memorize specific terms used in ophthalmology. Recognize systemic diseases with ocular manifestations.
- Interpret the knowledge acquired from theoretical activities to the actual ophthalmic problems.
- Show the ability for a team work with the professional associates in the clinical setting to conduct specific clinical assessment of an ophthalmic problem.
- Demonstrate appropriate communication skills and compassionate behavior in dealing with the patient and family.
- Perform proper and comprehensive history taking and clinical examination.

### B. Course Learning Outcomes

CLOs		Aligned-PLOs
1	<b>Knowledge and Understanding</b>	
1.1	Identify anatomy and functions of different parts of the eye and the common diseases of the different structures and outline their management plans.	K1
2	<b>Skills :</b>	
2.1	Interpret the results of clinical, laboratory, and radiological findings for proper problem solving and decision making	S1
2.2	Take a careful, accurate and organized history for eye diseases and perform a gentle and accurate eye physical examination	S3
2.3	Manage eye-threatening medical problems	S4

CLOs		Aligned-PLOs
2.4	Manage the common eye medical problems	S5
2.4	Operate communication skills properly	S6
<b>3</b>	<b>Values:</b>	
3.1	Apply professional attitude and ethical behavior with colleagues, facilitators, and patients	V1
3.2	Operate self-learning from updated medical information from different approved sources in the web.	V2
3.3	Demonstrate the capacity for self-reflection and personal development	C4

### Course Content

No	List of Topics	Contact Hours
<b>A</b>	<b>Lectures</b>	<b>10</b>
1	Anatomy And Physiology of the Eye	1
2	Acute Visual Loss	1
3	Chronic Visual Loss	1
4	The Red Eye	1
5	Ocular and Orbital Injuries	1
6	Strabismus	1
7	Neuro Ophthalmology	1
8	Eyelid Disorders	1
9	Pediatric Ophthalmology	1
10	Ocular Manifestations of Systemic Diseases	1
<b>B</b>	<b>Tutorials</b>	<b>14</b>
1	Amblyopia	1
2	Contact Lenses	1
3	Diabetic Retinopathy	1
4	Drugs and the eye	1
5	Glaucoma	1
6	History taking and eye examination	1
7	Lacrimal disorders	1
8	Ophthalmoscopy	1

9	Orbital disorders	1
10	Papilledema	1
11	Refractive errors	1
12	Retinopathy of Prematurity	1
13	Uveitis	1
14	Visual Field	1
<b>C</b>	<b>Skill Lab</b>	<b>4</b>
1	VA testing and Color vision testing	0.5
2	Ophthalmoscopy	0.5
3	Perimetry	0.5
4	Titmust Test	0.5
5	Slit Lamp Examination	0.5
6	Retinoscopy	0.5
7	Ophthalmic surgical instruments	0.5
8	Ophthalmic diagnostic tools	0.5
<b>D</b>	<b>Case Presentation</b>	<b>7</b>
1	Leukocoria	1.0
2	Optic atrophy	1.0
3	Abnormal pupil	1.0
4	Rupture Globe	1.0
5	Differential diagnosis of red eye	1.0
6	Ptosis	1.0
7	Diplopia	1.0
<b>E</b>	<b>Seminar</b>	<b>8</b>
1	Digital eye strain	0.5
2	Teleophthalmology	0.5
3	LASER in Ophthalmology	0.5
4	Retinoblastoma	0.5
5	Trachoma	0.5
6	Retinal detachment	0.5
7	Exposure keratopathy	0.5
8	Hyphema	0.5
9	Retinal Dystrophy	0.5
10	Corneal Dystrophy	0.5

11	HIV and the Eye	0.5
12	Secondary Glaucoma	0.5
13	Horner's Syndrome	0.5
14	Thyroid Eye Disease	0.5
15	Chemical Burn	0.5
16	Macular edema	0.5
<b>F</b>	<b>PBL</b>	<b>2</b>
1	Sudden loss of vision	0.5
2	Gradual Loss of vision	0.5
3	Bacterial Keratitis	0.5
4	Acute angle closure glaucoma	0.5
<b>Total</b>		<b>45</b>

**Teaching strategies and Assessment Methods for Students (Copy and paste the table from courses specification)**

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
<b>1.0</b>	<b>Knowledge and Understanding</b>		
1.1	Identify anatomy and functions of different parts of the eye and the common diseases of the different parts and outline their management plans.	Direct instruction (Lectures) Interactive instruction (Tutorial, PBL, CP and seminars)	- Witten exam - ORAL - PBL checklist
1.2			
<b>2.0</b>	<b>Skills</b>		
2.1	Interpret the results of clinical, laboratory, and radiological findings for	Interactive instruction (Case scenarios Seminar)	ORAL OSCE



Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
	proper problem solving and decision making	Case scenarios PBL)	
2.2	Take a careful, accurate and organized history for eye diseases and perform a gentle and accurate eye physical examination	Experiential learning (Skill lab, BST)	OSCE
2.3	Manage eye-threatening medical problems	Experiential learning (Skill lab, BST)	OSCE
2.4	Manage the common eye medical problems	Experiential learning (Skill lab, BST)	OSCE
2.5	Operate communication skills properly	Interactive instruction (Case scenarios Seminar Case scenarios PBL)	Seminar checklist ORAL checklist
<b>3.0</b>	<b>Values</b>		
3.1	Apply professional attitude and ethical behaviour with colleagues, facilitators, and patients	Interactive instruction (Case scenarios Seminar Case scenarios PBL)	PBL checklist ORAL Seminar checklist
3.2	Operate self-learning from updated medical information from different approved sources in the web.	Interactive instruction (Case scenarios Seminar Case scenarios PBL)	Written exam OSCE PBL checklist Seminar checklist
3.3	Demonstrate the capacity for self-reflection and personal development	Interactive instruction (PBL and CP)	Direct: PBL checklist CP checklist

## Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	PBL 1	1 and 2	5%
2	PBL 2	1 and 2	5%
3	Case Presentation	2 and 3	10%
4	Seminar	2 and 3	10%
5	MCQ (Final)	3	50%
6	OSPE	3	10%
7	ORAL	3	10%

## Course blueprint

## Teaching and Assessment Blueprint

### Ophthalmology (1202421)

Topics	Teaching strategies	Assessment methods	Skill						Values			% of total contact hours	% of total summative marks	
			K1	S1	S3	S4	S5	S6	V1	V2	C4			
Anatomy And Physiology of the Eye; Acute Visual Loss; Chronic Visual Loss; The Red Eye; Ocular and Orbital Injuries. Strabismus; Neuro Ophthalmology; Eyelid Disorders; Pediatric Ophthalmology; Ocular Manifestations of Systemic Diseases;  Amblyopia; Contact Lenses; Diabetic Retinopathy; Drugs and the eye; Glaucoma; History taking and eye examination; Lacrimal	Lectures		✓							✓			2.22x10=22.2 2	3x10=30  1.42x14=20

Topics	Teaching strategies	Assessment methods	Skill						Values			% of total contact hours	% of total summative marks	
			K1	S1	S3	S4	S5	S6	V1	V2	C4			
disorders; Ophthalmoscopy; Orbital disorders Papilledema; Refractive errors; Retinopathy of Prematurity; Uveitis; Visual Field	Tutorials	- Witten 50												
Anatomy And Physiology of the Eye; Acute Visual Loss; Chronic Visual Loss; The Red Eye; Ocular and Orbital Injuries. Strabismus; Neuro Ophthalmology; Eyelid Disorders; Pediatric Ophthalmology; Ocular Manifestations of Systemic Diseases;  Amblyopia; Contact Lenses; Diabetic Retinopathy; Drugs and the eye; Glaucoma; History taking and eye examination; Lacrimal disorders; Ophthalmoscopy; Orbital disorders Papilledema; Refractive errors; Retinopathy of Prematurity; Uveitis; Visual Field	Lectures             Tutorials	ORAL 10	✓							✓			0.42x24=10	0.42x24=10
VA testing: Snellen's VA Chart Color vision: Ishihara chart :Ophthalmoscopy Visual Field Perimetry Slit Lamp Removal of Corneal foreign body Ophthalmic surgical instruments Ophthalmic diagnostic tools Examination of the pupil	Skill Lab based strategies (Direct instruction, demonstration , Cooperative)	OSCE 10		✓	✓			✓		✓			1.11x16=17.7 6	0.62x16=10
Digital eye strain; Teleophthalmology; Congenital cataract; Congenital glaucoma; Retinoblastoma; Trachoma; Retinal detachment; Exposure keratopathy; Hyphema; Third ;nerve palsy	Interactive instruction ( Seminar)	Seminar checklist 10						✓	✓	✓			1.11x16=17.7 6	0.62x16=10

Topics	Teaching strategies	Assessment methods	Skill						Values			% of total contact hours	% of total summative marks	
			K1	S1	S3	S4	S5	S6	V1	V2	C4			
Sudden loss of vision; Gradual ;Loss of vision; Orbital cellulitis Acute angle closure glaucoma	Interactive instruction (PBL)	PBL checklist 10							✓	✓		✓	1.11x8=8.88	1.25x8=10.
Dry eye, Watery eye , Eye pain, Eye twitch , Eyelid swelling, Leukocoria , Nystagmus, Ptosis , pupillary problems	Interactive instruction ( Case presentation)	Case Presentation checklist 10		✓					✓	✓		✓	1.11x16=17.76	0.62x16=10

Course/module Coordinator	Dr. Mujeeb Ur Rehman Parrey
Department	Surgery
Date	26/10/2202

## Learning Resources

## Student Academic Counseling and Support

**Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :**

Faculty member must allocate at least four hours per week for each course he/she teaches for students to ask for help

- Academic counseling is arranged by the academic counseling advisors and the group for counseling for each staff member is available in his Banner account. Academic counseling issues and meetings are arranged and documented following the guidelines and forms of the university. Academic advisor

continuously monitors the students' performance, progress and offer advice related to all academic issues including course selection, adding, dropping, course conflict, credit transfer, or withdrawal.

## Learning Resources and Facilities

### 1. Learning Resources

<b>Required Textbooks</b>	<ul style="list-style-type: none"> <li>• Vaughan &amp; Asbury's General Ophthalmology, 17th. edition 2008. The McGraw Hill</li> <li>• Ophthalmology. Gerhard K. Lang, 3rd. edition 2016 Thieme</li> <li>• Oxford Handbook of Ophthalmology, 1st. edition 2006. Oxford University Press</li> <li>• The Wills Eye Manual Nika Bagheri, 7th. edition 2016. Wolters Kulwer</li> </ul>
<b>Essential References Materials</b>	<b>Clinical Ophthalmology: A systemic Approach.</b> <b>Jack J. Kanski, 7<sup>th</sup>. edition 2011 Elsevier</b>
<b>Electronic Materials</b>	<a href="http://www.emedicine.com/ophthalmology">www.emedicine.com/ophthalmology</a>
<b>Other Learning Materials</b>	<p>Eye model Ophthalmoscope Retinoscope Snellen's visual acuity chart Ishihara color plates Surgical micro instruments Diagnostic tools, eye patch, eye shield, fluorescein dye.</p>

### 2. Facilities Required

Item	Resources
<b>Accommodation</b> (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture rooms The faculty library in male and female section
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	Data show Internet access Smart board in lecture rooms and tutorials rooms
<b>Other Resources</b>	Lecture rooms

Item	Resources
(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	The faculty library in male and female sections

### Related check lists

- ✓ PBL Checklist
- ✓ Case Presentation checklist
- ✓ Seminar checklist
- ✓ Oral Exam checklist

## PBL Checklist

### Problem Based Learning - Rating Scale

Session \_\_\_\_\_ Topic \_\_\_\_\_ Facilitator \_\_\_\_\_ Date \_\_\_\_\_

PBL-Stage 1 (Rate each student between 0-5, where 0 = means no effort by the student, and 5=means maximum effort by the student)

No	Observable behavior	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7	Student 8	Student 9	Student 10
1	Participation in discussion	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
2	Active Listening	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
3	Interpersonal Skills	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
4	Knowledge of the topic	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
5	Proposes solution	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345

PBL-Stage 2 (Rate each student between 0-5, where 0 = means no effort by the student, and 5=means maximum effort by the student)

No	Observable behavior	Student 1	Student 2	Student 3	Student 4	Student 5	Student 6	Student 7	Student 8	Student 9	Student 10
1	Participation in discussion	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
2	Active Listening	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
3	Interpersonal Skills	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
4	Knowledge of the topic	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345
5	Proposes solution	012345	012345	012345	012345	012345	012345	012345	012345	012345	012345

Number	Student name	Session 1	Session 2	Final score
1				
2				
3				
4				
5				
6				

7				
8				
9				
10				

Facilitator:

Signature:

## Case Presentation checklist

### CASE PRESENTATION EVALUATION

DATE:

Number	Student name	Behavior 2	Preparation of subject 2	Confidence 2	Knowledge 2	Interpersonal skills 2	Total mark 10
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Facilitator:

Signature:

Facilitator:

Signature:

## Seminar checklist

### SEMINAR EVALUATION



DATE:

Number	Student name	Behavior 2	Preparation of subject 2	Confidence 2	Knowledge 2	Interpersonal skills 2	Total mark 10
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Facilitator:

Signature:

Facilitator:

Signature:

## ORAL Exam Checklist

### ORAL EXAM EVALUATION

DATE:

Number	Student name	Question 1 2	Question 2 2	Question 3 2	Question 4 2	Question 5 2	Total mark 10
1							
2							
3							
4							
5							
6							
7							





8							
9							
10							

Facilitator:

Signature:

Facilitator:

Signature:

## Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Indirect assessment
Extent of achievement of course learning outcomes	Instructor	Direct assessment
	Students	Indirect assessment
Quality of learning resources	Student	Indirect assessment

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

**Assessment Methods** (Direct, Indirect)

## Specification Approval Data

Council / Committee	Council Surgery Department
Reference No.	1202421
Date	

After the end of the course, please give your **FEEDBACK** through the following QR code:

