PROGRAMME SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme Title & Code	Ophthalmology Master degree 500
(2) Final award/degree	Master degree
(3) Department (s)	Ophthalmology
(4) Course Coordinator	Prof.Dr Rasheed El-Lakkany Prof of Ophthalmology. Mans. Un.
(5) External evaluator (s)	Prof Dr Mervat Salah Prof of Ophthalmology, Ain Shams Un.
(6) Date of approval by the Department`s council	31/7/2016
(7) Date of last approval of programme specification by Faculty council	9-8-2016

(B) Professional information

(1)   Programme Aims:

The broad aims of the Programme are as follows: (either to be written in items or as a paragraph)

1-The programme will provide trainee ophthalmologists with an in depth knowledge of the theory behind the practice of ophthalmology.

2- The programme will assess candidates understanding using the problem based learning questions in each module.

3- The programme will enable the candidate practical skills which required to achieve in their base hospital.

(2)   Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the programme, the candidate will be able to:

A- Knowledge and Understanding

A1	Describe the anatomy of the Eye
A2	Recognize updated data and researches concerning the eye, adnexae and nervous system specially in the field of microscopic and functional anatomy.
A3	Describe the Optics of the Eye
A4	Recognize updated data and researches including the application of physical, geometric and physiological optics to clinical management and an appreciation of the new principles of instrumentation and clinical practice in these areas.
A5	Recognize topics in general medicine& neuromedicine in relation to the eye :
A6	Recognize updated data and researches concerned general and neuro medicine in relation to the eye
A7	Recognize topics in General Surgery in relation to the eye
A8	Recognize updated data and researches concerned general surgery in relation to the eye
A9	Recognize topics of Ocular Pathology
A10	Recognize updated data and researches concerned Ocular Pathology .
A11	Recognize the topics of Ophthalmic Medicine.
A12	Recognize updated data and researches concerned Ophthalmic Medicine.
A13	Recognize different topics of Ophthalmic surgery
A14	Recognize updated data and researches concerned Ophthalmic surgery
A15	Show their recognition of basics of Microbiology and pathology.
A16	Recognize updated data and researches concerned the eye, adnexae and nervous system.
A17	Show their recognition of Physiology of the Eye
A18	Recognize updated data and researches concerned the physiology the eye, adnexae and nervous system.

2- Intellectual activities (I)

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

I1	Integrate microscopic and functional anatomy .
I2	Formulate a systematic approach for proper refeactive and optical corrective methods
I3	Integrate systemic & neurological disorders and their ocular impact.
I4	Integrate general surgical principles with ocular surgery
I5	predict the natural history of different ocular pathological issues.
I6	Integrate clinical findings in an ophthalmic diagnosis .
I7	formulate proper plan of treatment
I8	Integrate different procedures in management of ocular diseases.
I9	Integrate basic biomedical science with clinical care.
I10	understand the mechanism of vision, eye metabolism and their deviations

C- Professional/practical skills

P1	demonstrate their skills in **surgical anatomy and reconstructive surgeries**
P2	Perform retinoscopy
P3	Interpret topography
P4	Demonstrate their skills in diagnosing different ocular disorders associated with systemic and neurological diseases.
P5	Demonstrate their skills in **surgical emergencies**.
P6	Demonstrate their **skills plastic and reconstructive surgeries**
P7	Demonstrate their skills in **diagnosis of different pathological lesions.**
P8	Demonstrate their **skills in histopathological diagnosis**.
P9	Demonstrate their skills in **diagnosis of various ocular disorders**.
P10	show an ability to **implement different managegment plans for various ocular disorders**
P11	Demonstrate their skills in in management of ocular diseases
P12	Demonstrate their skills in prediction of the nature , severity and prognosis of various ocular disorders.
P13	Demonstrate their skills in **detection of normal ocular phenomena**

D- Communication & Transferable skills

T1	Demonstrate competence in data presentation. Statistical analysis and interpretation.
T2	Demonstrate key skills in the retrieval, preparation, analysis and interpretation of information from different sources.
T3	Make effective use of information technology e.g. web and internet. Database work
T4	Demonstrate self-direction and some originality in tackling and solving problems
T5	Work effectively both individually and in team and making appropriate use of the capacities of group members
T6	Communicate effectively, using the appropriate method with audiences of different levels of knowledge or experience.

(3)   Academic standards:

Academic standards for the programme are attached in Appendix I. in which NARS issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in Appendix II.

External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme: (please list here the references and the website)

http://www.rcsed.ac.uk/site/389/default.aspx

http://www.icoph.org/refocusing_education/educational_programs/residency.html

(4)   Curriculum structure and contents:

4.a– Duration of the programme (in years or months):…… **42 months**

4.b– programme structure:

Candidates should fulfill a total of …45……credit hours

•4.b.1: Number of credit hours:

First part:

٥ credit hours one semester 15 weeks.

Second part:

18 credit hours , threes semesters each 15 weeks.

Thesis:

6 credit hours.

Clinical training program:

14 credit hours

Scientific activities

2 credit hours

•4.b.2: Teaching hours/week:

1st Part:

Lectures: 5 teaching hours per week

Clinical/lab 0 hour per week

Total:5 credit hours

2nd Part:

Lectures: 6 teaching hours per week

Total 6 credit hours in each of the three semesters .

(5)   Programme courses:

	المقرر	Course	الكود	الساعات المتعمدة	
				المقرر	الإجمالي
الفصل الدراسي الأول	التشريح و النمو الجنيني للعين	Anatomy and Emberyology of the eye OPHT501	OPHT501	١	5
	فسيولوجيا العين	Physiology of the Eye OPHT503	OPHT503	١	
	مبادئ البصريات	Basic of Optics OPHT522 BO	OPHT522 BO	١	
	أمراض الباطنة	Basic of internal medicine related to the eye OPHT510	OPHT510	١	
	الأمراض العصبية المتعلقة بالعيون	Neurology related to the eye OPHT512	OPHT512		
	مبادئ الجراحةالعامة	Basic of surgery related to the eye OPHT520	OPHT520	١	
	الباثولوجيا العامة و الميكروبيولوجيا	Pathology and Microbiology OPHT 505& 507	OPHT 505& 507		
الفصل الدراسي					
	جراحة العين	Ophthalmic Surgery OPHT 522 OS	OPHT 522 OS	٦	

18	٦	OPHT 522 OM	Ophthalmic Medicine OPHT 522 OM	**طب العين**	**الثاني والثالث والرابع**
	٥	OPHT 522 OP	Ocular Pathology OPHT 522 OP	**باثولوجيا العين**	
	١	OPHT 522 OI & OPHT 522 CS & OPHT 522 EM	Ancillary diagnostic ophthalmic tests: 1- Retina 2- Orbit and adenexa 3- Cornea and refractive surgery		
14			**• برنامج التدريب الاكلينيكى والعملي في الجراحة**		**كراسة الأنشطة**
2			**• أنشطة علمية مختلفة**		
6			**تبدأ مع بداية الفصل الدراسي الثاني وتستمر لمدة أربعة فصول**		**الرسالة**
45			**إجمالي الساعات المعتمدة**		

Second part

a. Compulsory courses

Course	Lectures	Clinical	Total teaching hours	
			lectures	Clinical
Ophthalmic Surgery OPHT 522 OS	6	6		
	Sems 3: 2	Sems 3: 2	Sems 3: 30hrs	Sems 3: ٦٠hrs
	Sems 4: 2	Sems 4: 2	Sems 4: 30 hrs	Sems 4: ٦٠hrs
	Sems 5: 2	Sems 5: 2	Sems 5: 30hrs	Sems 5: ٦٠hrs
			Total: 90hrs	Total: ١٨0 hrs
Ophthalmic Medicine OPHT 522 OM	6	6		
	Sems 3: 2	Sems 3: 2	Sems 3: 30hrs	Sems 3: ٦0hrs
	Sems 4: 2	Sems 4: 2	Sems 4: 30 hrs	Sems 4: ٦0hrs
	Sems 5: 2	Sems 5: 2	Sems 5: 30hrs	Sems 5: ٦0hrs
			Total:	Total: ١٨0hrs

			90hrs	
Ocular Pathology OPHT 522 OP	**5**	**2**		
	Sems 3: 2	Sems 3: -	Sems 3: 30hrs	Sems 3: -
	Sems 4: 2	Sems 4: 1	Sems 4: 30 hrs	Sems 4: ٣٠hrs
	Sems 5: 1	Sems 5: 1	Sems 5: 15hrs	Sems 5: ٣٠hrs
			Total: 75hrs	Total: ٦0 hrs
Elective Course	1 hour	-		
	Sems 3: -	Sems 3: -	Sems 3: -	Sems 3: -
	Sems 4: -	Sems 4: -	Sems 4: -	Sems 4: -
	Sems 5: 1	Sems 5: -	Sems 5: 15 hrs	Sems 5: -
			Total: 15 hrs	Total: -

Programme–Courses ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2……etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

Course Title/Code	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14	a15	a16	a17	a18	i1	i2	i3	I4	I5	I6	I7	I8	I9	I10
Anatomy and Emberyology of the eye OPHT501	√	√																	√									
Physiology of the Eye OPHT503																	√	√									√	
Pathology and Microbiology OPHT 505& 507															√	√										√		
Basic of Optics OPHT522 BO			√	√																√								
Basic of internal medicine related to the eye OPHT510					√	√															√							
Neurology related to the eye OPHT512																												
Basic of surgery related to the eye OPHT520							√	√														√						
Ophthalmic Medicine OPHT 522 OM									√	√																√	√	
Ophthalmic Surgery OPHT 522 OS											√	√																√
Ocular pathology OPHT 522 OP									√	√														√				

Course Title/Code	p1	p2	p3	p4	P5	P6	P7	P8	P9	P10	P11	P12	P13	t1	t2	t3	T4	t5	t6
Anatomy and Emberyology of the eye OPHT501	√													√	√	√			
Physiology of the Eye OPHT503													√	√	√	√	√	√	√
Pathology and Microbiology OPHT 505& 507												√		√	√	√	√	√	√
Basic of Optics OPHT522 BO	√	√												√	√	√	√	√	√
Basic of internal medicine related to the eye OPHT510				√												√	√	√	√
Neurology related to the eye OPHT512																			
Basic of surgery related to the eye OPHT520					√	√								√	√	√	√	√	√
Ophthalmic Medicine OPHT 522 OM									√	√				√	√	√	√	√	√
Ophthalmic Surgery OPHT 522 OS											√			√	√	√	√	√	√
Ocular pathology OPHT 522 OP							√	√						√	√	√	√	√	√

(6)   Programme admission requirements:

:

●General requirements:
By laws regulating post graduate Studies.

●Specific requirements :
N/A

(7)   Regulations for progression and programme completion:

First part :

- **Minimally accepted attendance is 70%.**

Second part

1- Attendance Criteria:
- Minimally accepted attendance in each course is 7٠%.

2-Log book :

-The log should be fulfilled and signed by Head of the department.

3-Practical work:
-lab rotation according to the schedule determined by the supervisors

4- seminars:
-at least 2 seminars in topics determined by the supervisors must be prepared and presented by the candidate.

(8)   Evaluation of Programme's intended learning outcomes (ILOs):

Assessment methods:

8.1: Written exam for assessment of knowledge and intellectual skills.

82: Clinical exam   for assessment of intellectual and practical skills

8.3: Oral exam for assessment of knowledge and intellectual skills.

8.4 MCQ exam for continuous assessment of knowledge and intellectual skills.

Assessment schedule:

- MCQ exam at the end of each semster.
- Final exam at 6th month from admission to Master degree with total of 240 marks .

Percentage of each Assessment to the total mark:

نظام الامتحان وتوزيع الدرجات (ماجستير طب وجراحة العيون)

امتحان الجزء الأول

المقرر	الاختبار	تحريري	MCQ	شفهي	إكلينيكي	إجمالي
التشريح والنمو الجنيني للعين	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	١٤٤	٣٦	١٢٠		٣٠٠
مبادئ البصريات	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	١٤٤	٣٦	٦٠	٦٠	٣٠٠
فسيولوجيا العين	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	١٤٤	٣٦	١٢٠		٣٠٠
مبادئ الجراحة العامة	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي	١٤٤	٣٦	٦٠	٦٠	٣٠٠
مبادئ الأمراض الباطنة	اختبار تحريري مدته ساعة ونصف + اختبار شفهي + اختبار إكلينيكي	٧٢	١٨	٣٠	٣٠	١٥٠
الأمراض العصبية المتعلقة بالعيون	اختبار تحريري مدته ساعة ونصف + اختبار شفهي + اختبار إكلينيكي	٧٢	١٨	٣٠	٣٠	١٥٠
الباثولوجيا العامة والميكروبيولوجيا	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي	١٤٤	٣٦	١٢٠		٣٠٠
إجمالي الدرجة						١٨٠٠

الامتحان النهائي الشامل

المقرر	الاختبار	تحريري	MCQ	شفهي	إكلينيكي	عملي	إجمالي
طب العين	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار إكلينيكي	١٦٠	٤٠	١٠٠	١٠٠		٤٠٠
جراحة العين	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي (عملية جراحية صغرى)	١٦٠	٤٠	١٠٠		١٠٠	٤٠٠
باثولوجيا العين	اختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	١٦٠	٤٠	١٠٠		١٠٠	٤٠٠
المقرر الاختياري	اختبار تحريري مدته نصف ساعة	١٦	٤				٢٠
إجمالي الدرجة							١٢٢٠

Programme –Aims and ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2……etc), then aims of the programme are enlisted in first column, and an "√" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

Programme aims	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14
1-The programme will provide trainee ophthalmologists with an in depth knowledge of the theory behind the practice of ophthalmology.	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2- The programme will assess candidates understanding using the problem based learning questions in each module.		√	√	√	√	√	√	√	√	√		√	√	√
3- The programme will enable the candidate practical skills which required to achieve in their base hospital.														

Programme aims	A15	A16	A17	A18
1-The programme will provide trainee ophthalmologists with an in depth knowledge of the theory behind the practice of ophthalmology.	√	√	√	√
2- The programme will assess candidates understanding using the problem based learning questions		√	√	√

in each module.				
3- The programme will enable the candidate **practical skills** which required to achieve in their base hospital.				

Programme aims	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10
1-The programme will provide trainee ophthalmologists with an in **depth knowledge** of the theory behind the practice of ophthalmology.	√	√	√	√	√	√	√	√	√	√
2- The programme will assess candidates **understanding** using the problem based learning questions in each module.		√	√	√	√	√	√	√	√	√
3- The programme will enable the candidate **practical skills** which required to achieve in their base hospital.										

Programme aims	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
1-The programme will													

provide trainee ophthalmologists with an in depth knowledge of the theory behind the practice of ophthalmology.													
2- The programme will assess candidates understanding using the problem based learning questions in each module.	√	√	√	√	√	√	√	√	√	√	√	√	√
3- The programme will enable the candidate practical skills which required to achieve in their base hospital.	√	√	√	√	√	√	√	√	√	√	√	√	√

Programme aims	T1	T2	T3	T4	T5	T6
1-The programme will provide trainee ophthalmologists with an in depth knowledge of the theory behind the practice of ophthalmology.						
2- The programme will assess candidates understanding using the problem based learning questions in each module.						
3- The programme will enable the candidate practical skills which required to achieve in their base hospital.	√	√	√	√	√	√

programme-Methods of assessment   ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2……etc), then the **programme-Methods of assessment** are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in Appendix III.

programme-Methods of assessment	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	a14
8.1: Written exam for assessment of knowledge intellectual skills.	√	√	√	√	√	√	√	√	√	√	√	√	√	√
8.2: Clinical exam for assessment of intellectual and practical skills														
8.3: Oral exam for assessment of knowledge and intellectual skills.	√	√	√	√	√	√	√	√	√	√	√	√	√	√
8.4 MCQ exam for continuous assessment of knowledge and intellectual skills.	√	√	√	√	√	√	√	√	√	√	√	√	√	√

programme-Methods of assessment	A15	A16	A17	A18
8.1: Written exam for assessment of knowledge intellectual skills.	√	√	√	√

8.2: Clinical exam for assessment of intellectual and practical skills				
8.3: Oral exam for assessment of knowledge and intellectual skills.	√	√	√	√
8.4 MCQ exam for continuous assessment of knowledge and intellectual skills.	√	√	√	√

programme–Methods of assessment	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10
8.1: Written exam for assessment of know and intellectual skills.										
82: Clinical exam for assessment of intellectual and practical skills	√	√	√	√	√	√	√	√	√	√
8.3: Oral exam for assessment of knowledge and intellectual skills.	√	√	√	√	√	√	√	√	√	√
8.4 MCQ exam for continuous assessment of knowledge and intellectual skills.			√	√						

programme-Methods of assessment	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
8.1: Written exam for assessment of know and intellectual skills.											√	√	√
82: Clinical exam for assessment of intellectual and practical skills	√	√	√	√	√	√	√	√	√	√	√	√	√
8.3: Oral exam for assessment of knowledge and intellectual skills.	√	√	√	√	√	√	√	√	√	√	√	√	√
8.4 MCQ exam for continuous assessment of knowledge and intellectual skills.			√	√									

programme-Methods of assessment	T1	T2	T3	T4	T5	T6
8.1: Written exam for assessment of know and intellectual skills.						
82: Clinical exam for assessment of intellectual and practical skills	√	√	√	√	√	√
8.3: Oral exam for assessment of knowledge and intellectual skills.	√	√	√	√	√	√
8.4 MCQ exam for continuous			√	√		

assessment of knowledge and intellectual skills.						

Evaluator	Tools*	Sample size
Internal evaluator (s)	**Prof Dr Hani Abdelrahman**	
External Evaluator (s)	**Prof Dr Mervat Salah**	

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.	
Programme course coordinator: Prof.Dr Adel El layeh	Signature & date: