

توصيف برنامج الماجستير (عام 2013-2014)

1- معلومات أساسية : basic information

1 - اسم البرنامج :ماجستير طب العين وجراحاتها Master of Ophthalmology

2 - طبيعة البرنامج : (مشترك)

3- الأقسام المسؤولة عن البرنامج: القسم المانح للدرجة: قسم طب وجراحة العين

الأقسام المشتركة: باطنة عامة ونفسية-جراحة عامة

4- تاريخ إقرار البرنامج فى مجلس القسم : 1 / 9 / 2013

5- تاريخ إقرار البرنامج فى مجلس الكلية: 15/ 9 / 2013

6- مسئول البرنامج:

Prof. Dr. Khaled Gameel, prof. of ophthalmology

7- المراجعة الداخلية للبرنامج:

Prof Dr. Essam Elmatbouly, prof. of ophthalmology

المراجعة الخارجية للبرنامج-8

Prof Dr. Abdelkhalek El Saadany, prof. of ophthalmology, Menofia

university

2- معلومات متخصصة: Professional information

1 - الأهداف العامة للبرنامج :

1- Program aims:

The overall aims of the program are:

- 1-1 Ensuring that the graduate apply basics and tools of scientific ophthalmic research
- 1-2 Analyzing data and integrating information in ophthalmic practice
- 1-3 Coordinating knowledge and specialties in relation to ophthalmology
- 1-4 Dealing with current community needs and recent updates in field of ophthalmology
- 1-5 Identifying practical problems and preparing solutions
- 1-6 Mastering sufficient practical skills and use recent technology to improve his practice
- 1-7 Active communication and leadership
- 1-8 Making proper decisions
- 1-9 Using available resources for optimum practice
- 1-10 Awareness of community service and needs, taking in concern global and local changes
- 1-11 Ethical principles related to practice in the highly sensitive specialty
- 1-12 Maintenance of abilities necessary for continuous medical education

٢ - المخرجات التعليمية المستهدفة من البرنامج :

2-Intended Learning Outcomes (ILOS):

٢.أ - المعرفة والفهم :

2.a. Knowledge and Understanding

On successful completion of the program, the graduate will be able to:

- 2.a.1. Understand theories and basics of ophthalmology teaching and practice
- 2.a.2. Illustrate mutual relationship between ophthalmic practice and surrounding environment
- 2.a.3. Know recent updates in ophthalmic practice

- 2.a.4. Recognize ethical and legal aspects in ophthalmic practice
- 2.a.5. Highlight basics and principle of quality assurance in field of ophthalmology
- 2.a.6. Understand basics and principles of scientific research

٢. ب - القدرات الذهنية :

2.b. Intellectual Skills:-

On successful completion of the program, the graduate will be able to:

- 2.b.1. Analyzing and assessing data in ophthalmic field
- 2.b.2. Solve problems in case of insufficient data
- 2.b.3. Integrate different knowledge resources to deal with practical problems
- 2.b.4. Construct a research work and scientific papers
- 2.b.5. Formulate risk assessment in ophthalmic practice
- 2.b.6. Design plan for development in field of ophthalmology
- 2.b.7. Develop decisions in various scenarios of ophthalmic practice

٢. ج . مهارات مهنية وعملية :

2.c. Practical & Professional Skills:-

On successful completion of the program, the graduate will be able to

2.c.1 Apply professional skills in the field of *ophthalmic* surgery and medicine .

2.c.2 Write medical reports.

2.c.3 Use imaging, electrophysiological data in diagnosis of *ophthalmic* surgery and medicine.

٢.د . مهارات عامة ومنتقلة :

2.d. General and transferable skills:-

By the end of the sessions the student should be able to:

2.d.1 Use active communications in its various aspects

2.d.2. Use recent technology to improve his practice

2.d.3. Establish self assessment strategy and analyzing his needs in ophthalmic practice

2.d.4. Use different resources to gain information

2.d.5. Manage performance assessment of his colleagues in the field of ophthalmology

2.d.6. Work in a team and leading teams in various ophthalmic practices

2.d.7. Manage time effectively

2.d.8. Express continuous self learning capabilities

٣ - المعايير الأكاديمية للبرنامج :

3. Academic Standards:

- Academic Reference Standards (ARS) of Master Program of Ophthalmolgy, approved in department council date 2 / 6 / 2013, and in faculty council no. (354) date 16 / 6 / 2013. (ملحق ١)

4- Reference standards

4- العلامات المرجعية:

a) المعايير القياسية لبرامج الدراسات العليا (درجة الماجستير) الصادرة عن الهيئة (مارس ٢٠٠٩) القومية لجودة التعليم والإعتماد
Academic reference standards (ARS) , Master Program (March 2009)

, which were issued by the National Authority for Quality Assurance & Accreditation of Education NAQAAE (ملحق ٢)

5 - هيكل ومكونات البرنامج :

(5): Curriculum structure and contents:

أ - مدة البرنامج : ٧٢ weeks

- 1st part: One semester (24 weeks)
- 2nd part: Two semesters (48 weeks)

ب - هيكل البرنامج:

- Total hours of program 40 credit hours
- Theoretical: 15 ¾ credit hours
- Practical: 24.25 credit hours

ج - مستويات ومقررات البرنامج:

الزامي compulsory

الساعات المعتمدة	الكود	المقررات	البند
6	Univ 601		متطلبات الجامعة والكلية
2	Oph 601	anatomy	الجزء الأول
2	Oph 602	optics	

9	1	Ophth 603	Physiology	
	2	Ophth 604	General surgery	
	2	Ophth 605	Internal medicine & neuro-psychiatry	
5				كراسة الانشطة
	5	Ophth 606	Medical ophthalmology	الجزء التانى
	5	Ophth 607	Ophthalmic surgery	
	4	Ophth 608	Microbiology & pathology	
	٦			رسالة ماجستير
٤٠				الاجمالى

ج: خطة التدريس: Teaching plan

First part (15 weeks duration/6 months)

a- Compulsory courses:

		Number s of hours per week			otal teaching hours
		Lectures	practical	tutorials	
Anatomy	Ophth 601	1,٥		1,٥	90
optics	Ophth 602	1.5		1.5	90

physiology	Ophth 603	3/4	3/4	45
General surgery	Ophth 604	1.5	1.5	90
Internal medicine & neuro-psychiatry	Ophth 605	1.5	1.5	90
Total:				405

b- Elective courses: none

C-selective courses:none

Second part (30 weeks duration/12 months)

a- Compulsory courses:

Course Title	Course Code	Total teaching hours		
		lectures	practical	
Medical ophthalmology	Ophth 606	3	2	432
Ophthalmic surgery	Ophth 607	3	2	432
Microbiology & pathology	Ophth 608	3	1	288

Total.			1152
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b- Elective courses: none

c- selective courses:none

-محتويات المقررات (راجع توصيف المقررات)

7- متطلبات الإلتحاق بالبرنامج :

(7): Program admission requirements:

مادة (٤): يشترط في قيد الطالب لدرجة الماجستير:

(١)

- أ- أن يكون حاصلًا على درجة البكالوريوس في الطب والجراحة من إحدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمي معترف به من الجامعة بتقدير جيد على الأقل.
- ب- يسمح للحاصل على الدبلوم وفقا لنظام هذه اللائحة وبتقدير جيد على الأقل بتسجيل رسالة لاستكمال درجة الماجستير بشرط ألا يكون قد مر أكثر من ثلاث سنوات على تاريخ حصوله على درجة الدبلوم وبغض النظر على تقديره في درجة البكالوريوس.
- ت- يسمح للحاصل على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره في الدبلوم لا يقل عن جيد وبغض النظر عن تقديره في البكالوريوس.

(٢) أن يكون قد أمضى السنة التدريبية أو ما يعادلها (سنة الامتياز)

(٣) أن يتفرغ للدراسة لمدة سنة على الأقل في الجزء الثاني (فصلين دراسيين)

مادة (٥): يكون التقدم للقيود لدرجة الماجستير مرة واحدة في السنة خلال شهري يوليو وأغسطس من كل عام.

• تبدأ الدراسة لدرجة الدبلوم في شهر أكتوبر من كل عام.

8 - القواعد المنظمة لإستكمال البرنامج:

مادة (٦): تتولى لجنة الدراسات العليا بالكلية عن طريق لجنة تشكل لكل تخصص من أعضاء مجلس القسم التابع له المادة والقسم المانح للدرجة وضع البرنامج التفصيلي للمقررات فى حدود الساعات المعتمدة الواردة باللائحة وعند الاختلاف يتم الاسترشاد بمقررات جامعة القاهرة ومقررات الشهادات العالمية الاوربية والامريكية يعتمدها مجالس الأقسام ثم يقرها مجلس الكلية وتشمل هذه الساعات محاضرات نظرية ودروس عملية وتدريب اكلينيكي ومحاضرات وندوات مشتركة.

مادة (٧): يشترط فى الطالب لنيل درجة ماجستير التخصص فى أحد الفروع الاكلينيكية والعلوم الطبية الأساسية:

- أ- حضور المقررات الدراسية والتدريبات الاكلينيكية والعملية والمعملية بصفة مرضية طبقا للساعات المعتمدة.
- ب- أن يقوم بالعمل كطبيب مقيم أصلى أو زائر لمدة سنة على الأقل فى قسم التخصص بالنسبة للعلوم الاكلينيكية.
- ت- أن ينجح فى امتحان القسمين الأول والثانى.
- ث- اجتياز الطلب لثلاث دورات فى الحاسب الألى (دورة فى مقدمة الحاسب – دورة تدريبية متوسطة – دورة فى تطبيقات الحاسب الألى) وذلك قبل مناقشة الرسالة.
- ج- اجتياز اختبار التوفيل بمستوى لا يقل عن ٤٠٠ وحدة وذلك قبل مناقشة الرسالة.
- ح- أن يقوم باعداد بحث فى موضوع تقره الجامعة بعد موافقة مجلس القسم ومجلس الكلية ينتهى باعداد رسالة تقبلها لجنة التحكيم.

9 - طرق وقواعد تقييم الملتحقين بالبرنامج :

9- Students Assessment methods:

م	الوسيلة	مخرجات التعلم المستهدفة
1	Written examination	To assess knowledge and understanding & intellectual skills. From 2.a.1 to 2.a.6

And from 2.b.1 to 2.b.7		
To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1 to 2.a.6 ,from 2.b.1 to 2.b.7 , from 2.c.1 to 2.c.3 And from 2.d.1 to 2.d.8	Oral examination	2
To assess knowledge and understanding, intellectual skills, professional General & transferable skills From 2.a.1 to 2.a.6 ,from 2.b.1 to 2.b.7 , from 2.c.1 to 2.c.3 And from 2.d.1 to 2.d.8	Practical examination	3

Final exam.

First part

إجمالي	الدرجة				الاختبار	المقرر
	إكلينيكي	عملي	خفصي	تحريري		
100			40	60	اختبار تحريري مدته ثلاث ساعات + اختبار خفصي	التشريح
100			40	60	اختبار تحريري مدته ثلاث ساعات + اختبار خفصي	الفسيولوجي
100		25	25	50	اختبار تحريري مدته ثلاث ساعات + اختبار خفصي وعملي	البصريات
50			25	25		الباطنة العامة
50			25	25		الجراحة العامة
400	إجمالي الدرجة					

Second part

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	خفصي	تحريري		
300	75		75	150	اختبار تحريري ثلاث ساعات + اختبار خفصي وعملي	جراحة العين

٣٠٠	٧٥		٧٥	١٥٠	اختبار تحريري، ثلاث ساعات + اختبار شفهي وعملي	أمراض العين
100	20		30	50	اختبار تحريري، ثلاث ساعات + اختبار شفهي وعملي	باثولوجيا وبكتريولوجيا العين
٧٠٠	إجمالي الدرجة					

10 - طرق تقويم البرنامج :

10- Evaluation of Program:

Evaluator	Tools	Signature
Internal evaluator (s) مقيّم داخلي	Focus group discussion Meetings	<u>Report</u>
External Evaluator (s) مقيّم خارجي	Reviewing according to external evaluator checklist report.	<u>Report</u>
Senior student (s) طلاب السنة النهائية	مقابلات , امتحان	<u>All</u>
Alumni الخريجون	مقابلات , امتحان	<u>Not less than 50% from the last 3 years</u>
Stakeholder (s) أصحاب العمل	مقابلات , امتحان	<u>Representative samples from all sectors</u>
Others طرق أخرى	none	

11: استراتيجيات التعليم و التعلم علي مستوي البرنامج:

١. استراتيجية التعلم النشط. **Active learning**
٢. استراتيجية التعليم المبني على النتائج. **Outcome-based learning**

٣. استراتيجية التعليم المبني على حل المشكلات. Problem-based learning

المسؤول عن البرنامج : أ.د. خالد جميل
التوقيع التاريخ :
1/9/2013

Program Coordinator:

Name Prof Dr ...Khaled Gameel..... Signature.....Date
51/9/2013.....

الملحقات :

ملحق ١ : Academic standard of the program

ملحق ٢ : المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة.

ملحق 3 : مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا الصادرة عن الهيئة.

ملحق 4 : مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق 5 : مصفوفة المقررات مع البرنامج Program-Courses ILOs Matrix

ملحق 6 : توصيف المقررات

المعايير الأكاديمية لبرنامج ماجستير طب العين وجراحاتها

١ - مواصفات الخريج:

خريج برنامج ماجستير طب العين وجراحاتها يجب أن يكون قادرا على:

- 1-13 Applying basics and tools of scientific research
- 1-14 Analyzing data and integrating information in ophthalmic practice
- 1-15 Coordinating knowledge and specialties in relation to ophthalmology
- 1-16 Dealing with current community needs and recent updates in field of ophthalmology
- 1-17 Identifying practical problems and preparing solutions
- 1-18 Mastering sufficient practical skills and use recent technology to improve his practice
- 1-19 Active communication and leadership
- 1-20 Making proper decisions
- 1-21 Using available resources for optimum practice
- 1-22 Awareness of community service and needs, taking in concern global and local changes
- 1-23 Ethical principles related to practice in the highly sensitive specialty
- 1-24 Maintenance of abilities necessary for continuous medical education

٢ - المعايير القياسية العامة:

2-1- المعرفة والفهم :

2.1. Knowledge and Understanding:

By the end of the program, the candidate should be able to have sound knowledge about:

- 2.1.1. Theories and basics of ophthalmology teaching and practice
- 2.1.2. Mutual relationship between ophthalmic practice and surrounding environment
- 2.1.3. Recent updates in ophthalmic practice
- 2.1.4. Ethical and legal aspects in ophthalmic practice
- 2.1.5. Basics and principle of quality assurance in field of ophthalmology
- 2.1.6. Basics and principles of scientific research

2-2 . المهارات الذهنية :

2.2. Intellectual Skills:-

By the end of the program the candidate should be able to gain sufficient skills about:

- 2.2.1. Analyzing and assessing data in ophthalmic field
- 2.2.2. Solving problems in case of insufficient data
- 2.2.3. Linking different knowledge resources to deal with practical problems
- 2.2.4. Constructing a research work and scientific papers
- 2.2.5. Risk assessment in ophthalmic practice

2.2.6. Planning for development in field of ophthalmology

2.2.7. Making decisions in various scenarios of ophthalmic practice

3-2. مهارات مهنية :

2.3. Practical & Professional Skills:-

By the end of the program, the student should be able to perform:

2.3.1 Professional skills in the field of ophthalmic surgery and medicine .

2.3.2 Writing medical reports, revising old medical data and establishing continually updated patient database

2.3.3 Assessing genetics, imaging, electrophysiological data in diagnosis of ophthalmic surgery and medicine.

4-2. مهارات عامة ومنتقلة:

2.4. General and transferable skills:

By the end of the program the graduate will be able to practice:

2.4.1 Active communications in its various aspects

2.4.2. Using recent technology to improve his practice

2.4.3. Self assessment and analyzing his needs in ophthalmic practice

2.4.4. Using different resources to gain information

2.4.5. Assessing the performance of his colleagues in the field of ophthalmology

2.4.6. Working in a team and leading teams in various ophthalmic practices

2.4.7. Managing time effectively

2.4.8. Continuous self learning capabilities

ملحق 2: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة

ثانثا : برامج الماجستير

١- مواصفات الخريج

- خريج برنامج الماجستير فى أى تخصص يجب أن يكون قادرا على :
- ١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمى واستخدام أدواته المختلفة
 - ٢-١ تطبيق المنهج التحليلى واستخدامه فى مجال التخصص
 - ٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة فى ماسته المهنية
 - ٤-١ إظهار وعيا بالمشاكل الجارية والرؤى الحديثة فى مجال التخصص
 - ٥-١ تحديد المشكلات المهنية وإيجاد حلول لها
 - ٦-١ إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
 - ٧-١ التوصل بفاعلية والقدرة على قيادة فرق العمل
 - ٨-١ اتخاذ القرار فى سياقات مهنية مختلفة
 - ٩-١ توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
 - ١٠-١ إظهار الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة فى ضوء المتغيرات العالمية والإقليمية
 - ١١-١ التصرف بما يعكس الالتزام بالنزهة والمصداقية والالتزام بقواعد المهنة
 - ١٢-١ تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر

2- المعايير القياسية العامة

١-٢ المعرفة والفهم :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج على فهم ودراية بكل من :
- ١-٢-١ النظريات والاساسيات المتعلقة بمجال التعلم وكذا فى المجالات ذات العلاقة
 - ٢-١-٢-٢ التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة
 - ٣-١-٢ التطورات العلمية فى مجال التخصص
 - ٤-١-٢ المبادئ الاخلاقية والقانونية للممارسة المهنية فى مجال التخصص
 - ٥-١-٢ مبادئ واساسيات الجودة فى الممارسة المهنية فى مجال التخصص
 - ٦-١-٢ اساسيات واخلاقيات البحث العلمى

٢-٢ المهارات الذهنية :

- بأنتهاء دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :

- ١-٢-٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
- ٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
- ٣-٢-٢ الربط بين المعارف المختلفة لحل المشاكل المهنية
- ٤-٢-٢ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
- ٥-٢-٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص
- ٦-٢-٢ التخطيط لتطوير الاداء في مجال التخصص
- ٧-٢-٢ اتخاذ القرارات المهنية في سياقات مهنية متنوعة

٣-٢ المهارات المهنية

- بانتهاج دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
- ١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة في مجال التخصص
- ٢-٣-٢ كتابة وتقييم التقارير المهنية
- ٣-٣-٢ تقييم الطرق والادوات القائمة في مجال التخصص

٤-٢ المهارات العامة والمنتقلة :

- بانتهاج دراسة برنامج الماجستير يجب ان يكون الخريج قادرا على :
- ١-٤-٢ التواصل الفعال بأنواعه المختلفة
- ٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
- ٣-٤-٢ التقييم الذاتي وتحديد احتياجاته التعليمية
- ٤-٤-٢ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
- ٥-٤-٢ وضع قواعد ومؤشرات تقييم اداء الاخرين
- ٦-٤-٢ العمل في فريق سياقات مهنية مختلفة
- ٧-٤-٢ ادارة الوقت بكفاءة
- ٨-٤-٢ التعلم الذاتي والمستمر

ملحق ٣: مصفوفة المعايير الأكاديمية للبرنامج مع المعايير القياسية للدراسات العليا
الصادرة عن الهيئة

مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الماجستير)
1-1 Applying basics and tools of scientific research	١-١ إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة
1-2 Analyzing data and integrating information in ophthalmic practice	٢-١ تطبيق المنهج التحليلي واستخدامه في مجال التخصص
1-3 Coordinating knowledge and specialties in relation to ophthalmology	٣-١ تطبيق المعارف المتخصصة ودمجها مع المعارف ذات العلاقة في ممارسته المهنية
1-4 Dealing with current community needs and recent updates in field of ophthalmology	١-4 إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص
1-5 Identifying practical problems and preparing solutions	١-5 تحديد المشكلات المهنية وإيجاد حلول لها
1-6 Mastering sufficient practical skills and use recent technology to improve his practice	١-6 إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية
1-7 Active communication and leadership	١-7 التوصل بفاعلية والقدرة على قيادة فرق العمل
1-8 Making proper decisions	١-8 اتخاذ القرار في سياقات مهنية مختلفة
1-9 Using available resources for optimum practice	١-9 توظيف الموارد المتاحة بما يحقق أعلى استفادة والحفاظ عليها
1-10 Awareness of community service and needs, taking in concern global and local changes	١-10 إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات العالمية والاقليمية

1-11 Ethical principles related to practice in the highly sensitive specialty	1-11 التصرف بما يعكس الالتزام بالنزهة والمصادقية والالتزام بقواعد المهنة
1-12 Maintenance of abilities necessary for continuous medical education	1-12 تنمية ذاته أكاديميا ومهنيا وقادرا على التعلم المستمر
٢-٢ - القدرات الذهنية :	
<p>2.٢. Intellectual Skills:-</p> <p>By the end of the program the candidate should be able to gain sufficient skills about:</p>	
2.2.1. Analyzing and assessing data in ophthalmic field	١-٢-٢ تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل
2.2.2. Solving problems in case of insufficient data	٢-٢-٢ حل المشاكل المتخصصة مع عدم توافر بعض المعطيات
2.2.3. Linking different knowledge resources to deal with practical problems	٣-٢-٢ الربط بين المعارف المختلفة لحل المشاكل المهنية
2.2.4. Constructing a research work and scientific papers	٤-٢-٢ اجراء دراسة بحثية او كتابة دراسة علمية منهجية حول مشكلة بحثية
2.2.5. Risk assessment in ophthalmic practice	٥-٢-٢ تقييم المخاطر في الممارسات المهنية في مجال التخصص
2.2.6. Planning for development	

in field of ophthalmology	٦-٢-٢ التخطيط لتطوير الاداء فى مجال التخصص
2.2.7. Making decisions in various scenarios of ophthalmic practice	٧-٢-٢ اتخاذ القرارات المهنية فى سياقات مهنية متنوعة
٣-٢-٢. مهارات مهنية وعملية :	
<p>2.٣. Practical & Professional Skills:-</p> <p>By the end of the program, the student should be able to perform:</p>	
2.3.1 Professional skills in the field of ophthalmic surgery and medicine .	١-٣-٢ اتقان المهارات المهنية الاساسية والحديثة فى مجال التخصص
2.٣.2 Writing medical reports, revising old medical data and establishing continually updated patient database	٢-٣-٢ كتابة وتقييم التقارير المهنية
2.3.3 Assessing genetics, imaging, electrophysiological data in diagnosis of ophthalmic surgery and medicine.	٣-٣-٢ تقييم الطرق والادوات القائمة فى مجال التخصص
٤-٢-٢. مهارات عامة :	
<p>2.٤. General and transferable skills:</p> <p>By the end of the program the graduate will be able to practice:</p>	

2.4.1 Active communications in its various aspects	٢-٤-١ التواصل الفعال بأنواعه المختلفة
2.4.2. Using recent technology to improve his practice	٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية
2.4.3. Self assessment and analyzing his needs in ophthalmic practice	٢-٤-٣ التقييم الذاتى وتحديد احتياجاته التعليمية
2.4.4. Using different resources to gain information	٢-٤-٤ استخدام المصادر المختلفة لحصول على المعلومات والمعارف
2.4.5. Assessing the performance of his colleagues in the field of ophthalmology	٢-٤-٥ وضع قواعد ومؤشرات تقييم اداء الاخرين
2.4.6. Working in a team and leading teams in various ophthalmic practices	٢-٤-٦ العمل فى فريق سياقات كهنية مختلفة
2.4.7. Managing time effectively	٢-٤-٧ ادارة الوقت بكفاءة
2.4.8. Continuous self learning capabilities	٢-٤-٨ التعلم الذاتى والمستمر

ملحق ٤ : مصفوفة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية لبرنامج ماجستير طب وجراحة العين (مواصفات الخريج)
1.1	1-1 Applying basics and tools of scientific research
1.2	1-2 Analyzing data and integrating information in ophthalmic practice
1.3	1-3 Coordinating knowledge and specialties in relation to ophthalmology
1.4	1-4 Dealing with current community needs and recent updates in field of ophthalmology
1.5	1-5 Identifying practical problems and preparing solutions
1.6	1-6 Mastering sufficient practical skills and use recent technology to improve his practice
1.7	1-7 Active communication and leadership
1.8	1-8 Making proper decisions
1.9	1-9 Using available resources for optimum practice
1.10	1-10 Awareness of community service and needs, taking in concern global and local changes
1.11	1-11 Ethical principles related to practice in the highly sensitive specialty
1.12	1-12 Maintenance of abilities necessary for continuous medical education

نواتج تعلم البرنامج											المعايير الأكاديمية للبرنامج			
المعرفة والفهم														
								2.a.6	2.a.5	2.a.4	2.a.3	2.a.2	2.a.1	
													√	أ. المعرفة والفهم : By the end of the program, the candidate should be able to have sound knowledge about : √ 2.1.1. Theories and basics of ophthalmology teaching and practice
												√		2.1.2. Mutual relationship between ophthalmic practice and surrounding environment
											√			2.1.3. Recent updates in ophthalmic practice

									v					2.1.4. Ethical and legal aspects in ophthalmic practice
									v					2.1.5. Basics and principle of quality assurance in field of ophthalmology
								v						2.1.6. Basics and principles of scientific research

نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج
Intellectual skills							
2.b.1	2.b.2	2.b.3	2.b.4	2.b.5	2.b.6	2.b.7	
						√	ب - القدرات الذهنية : By the end of the program, the candidate should be able to to gain sufficient skills about: 2.2.1. Analyzing and assessing data in ophthalmic field .
						√	2.2.2. Solving problems in case of insufficient data
				√			2.2.3. Linking different knowledge resources to deal with practical problems
			√				2.2.4. Constructing a research work and scientific papers
		√					2.2.5. Risk assessment in ophthalmic practice
	√						2.2.6. Planning for development in field of ophthalmology
√							2.2.7. Making decisions in various scenarios of ophthalmic practice

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نواتج تعلم البرنامج						المعايير الأكاديمية للبرنامج	
Practical & Professional Skills							
			2.c.3	2.c.2	2.c.1		
					v	ج - مهارات مهنية وعملية : By the end of the program, the candidate should be able to perform 2.3.1 Professional skills in the field of ophthalmic surgery and medicine . .	
				v		2.3.2 Writing medical reports, revising old medical data and establishing continually updated patient database	
			v			2.3.3 Assessing genetics, imaging, electrophysiological data in diagnosis of ophthalmic surgery and medicine.	

نواتج تعلم البرنامج		المعايير الأكاديمية للبرنامج	
General and transferable skills			

ملحق (٥) مصفوفة المعارف والمهارات للبرنامج الدراسي

المعارف Knowledge & Understanding									ILOs	
			2.a.6	2.a.5	2.a.4	2.a.3	2.a.2	2.a.1	Courses & codes	
							√	√	OPTH 601	Anatomy •
			√		√			√	OPTH 602	Physiology •
						√		√	OPTH 604	Pathology •
					√			√	OPTH 603	Optics •
			√	√	√	√	√	√	OPTH 606	Ophthalmic medicine •
			√	√	√	√	√	√	OPTH 607	Ophthalmic surgery •

مهارات ذهنية Intellectual Skills								ILOs	
	2.b.7	2.b.6	2.b.5	2.b.4	2.b.3	2.b.2	2.b.1	Courses & codes	
				√			√	OPTH 601	Anatomy •
	√		√			√		OPTH 602	Physiology •
		√			√			OPTH 604	Pathology •
			√					OPTH 603	Optics •
			√		√	√	√	OPTH 606	Ophthalmic medicine •
	√	√		√		√		OPTH 607	Ophthalmic surgery •

مهارات عملية و مهنية Practical & Professional Skills							ILOs	
				2.c.3	2.c.2	2.c.1	Courses & codes	
				√		√	OPTH 601	Anatomy •
					√	√	OPTH 602	Physiology •
				√		√	OPTH 604	Pathology •
						√	OPTH 603	Optics •
				√	√	√	OPTH 606	Ophthalmic medicine •
				√	√	√	OPTH 607	Ophthalmic surgery •

General and transferable مهارات عامة								ILOs	
2.d.8	2.d.7	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2	2.d.1	Courses & codes	
		√		√	√			OPTH 601	Anatomy •
			√			√	√	OPTH 602	Physiology •
√		√	√				√	OPTH 604	Pathology •
				√		√	√	OPTH 603	Optics •
		√		√	√	√		OPTH 606	Ophthalmic medicine •
√			√	√	√		√	OPTH 607	Ophthalmic surgery •

رئيس القسم
التوقيع :

أستاذ المادة
التوقيع :

ملحق رقم ٦ : توصيف المقررات

Program courses

First part
1- Anatomy & Embryology
2- Physiology
3- Optics
4- General surgery
5- Internal medicine & neuro-psychiatry
Second part
1-Medical ophthalmology
2- Surgical ophthalmology
٣- Pathology & bacteriology



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: Ocular anatomy and embryology for postgraduates

(Code) OPTH 601

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Master degree program:** Level: 1st part
- **Date of specification approval:**
 - Department council, date: ١/٩/201٣
 - Faculty council no ٣٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** _____ 100 _____ marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 2 hours/week = 45 total teaching hours
 - **Theoretical: 1.5 hours**
 - **Practical: 0.5 hours**

B) Professional Information:

1- Overall Aim of the Course:

Successful candidates will demonstrate to the examiners that they have a detailed and comprehensive knowledge of anatomy of relevance to the practice of ophthalmology - in particular the eye, the visual pathways, the orbit and its contents including peri-orbital structures. They are also expected to have an understanding of the embryology, maturation and normal ageing changes of the human eye. They should also be familiar with the anatomy of the head and neck including neuroanatomy, histology and the use of diagnostic imaging as it pertains to the visual system .

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the course, students should be able to:

- 2.1.1 Describe the normal anatomical organization of the human eye, orbit and its contents and head and neck in terms of cells, tissues, organs and systems
- 2.1.2 Describe the principal components of the human visual system and their function in detail
- 2.1.3 Describe how diagnostic imaging may be used in ophthalmic practice

2.2. Intellectual Skills:

By the end of the course, students should be able to:

- 2.2.1 integrate clinical findings in ophthalmic diagnosis .
- 2.2.2. formulate proper plans of treatment.
- 2.2.3 Link between given data and problem solving.
- 2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

- 2.3.1-interpret function of optical system
 2.3.2-interpret the relation between the eye and surrounding structures like cranium ,sinuses and nasal cavities.
 2.3.3-Master the basic and modern anatomical skills to help in clinical and surgical Skills in future practice.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

Work effectively both individually and in team work .

2.4.1 Make effective use of information technology eg, Internet

2.4.2 Demonstrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
1- Anatomy of the orbit	1.5	1.5	3	6.94
2- extra-ocular muscle, and periorbita	1.5	1.5	3	6.94
3- Eye lid(blood and nerve supply)	1.5	1.5	3	6.94
4- Sclera and episclera	1	0.75	1.75	4.17
5- Anatomy,histology and embryology of the conjunctiva	0.75	1	1.75	4.17
6- Limbus, anterior chamber, angle and posterior chamber	1	0.75	1.75	4.17
7- Anatomy and embryology of Uvea(blood and nerve supply)	2	1.75	3.75	8.33
8- Anatomy ,histology and embryology of cornea	1.75	2	3.75	8.33

9- Anatomy,histology and embryology of lens	2	1.75	3.75	8.33
10- Anatomy ,histology and embryology of retina and vitreous	2	2.25	4.25	9.72
11- Blood supply of the eye and its adnexa	1.5	1.5	3	6.94
12- Anatomy,histology and embryology of the lacrimal system	1.25	1.25	2.5	5.56
13- Visual pathway, optic nerve, optic chiasm and relations, optic tract, striate, cortex	2	1.75	3.75	8.33
14- Neuro-anatomy {occulomotor neves (3 th , 4 th ,6 th),5 th ,7 th nerve and autonomic nerve supply of the eye}	2.5	2.5	5	11.11
Total	22.5	22.5	45	100

4- Teaching and learning methods:

METHODS USED:

1. Modified Lectures
2. Small group discussions
3. Problem solving.

TEACHING PLAN:

Lectures: Division of students into 4 groups

1 hour /week, Time from 9.0am to 10.30 am .

Tutorials: 1 hour /week, Time from 10.30am to 12 pm

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1</u> hour /week; 1.5 teaching hour	22.5 hours	50%
Tutorial	<u>1</u> hour /week; 0.5 teaching hour	22.5 hours	50%
Total		45 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Log book	To assess practical & transferrable skills, attendance of different conferences, thesis discussions, seminars, workshops, attendance of scientific lectures.
Seminars	To assess knowledge & skills of analysis and discussion, the candidate should prepare and present at least one seminar in a topic related to the course and determined by the supervisors in front of the department staff.

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- MCQ & Problem solving exams.	Every 4 wks during the

	course
2- final exam: a-written b-oral	End of the 24 th wk

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam: a- Written	60	60%
b- Oral	40	40%
Total	100	100%

- Other assessment without marks: practical tests and exams, seminars and log book assessment are requirement of the 2nd part exam.
- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Final exam: a- Written b- Practical c- Oral	(Short essay) questions, case study, problem solving Slides
2- Assignments & other activities	practical books
Total	

6- List of references:

6.1- Essential Books (Text Books)

[A. K. Khurana](#), [Indu Khurana](#) Anatomy & Physiology of Eye, 2nd Ed. New delhi (india) 2008

6.2- Recommended Books

Richard S. Snell , Michael A. Lemp Clinical Anatomy of the Eye 2nd Ed. Blackwell science 1998

6.3- Periodicals

British journal of anatomy

Web Sites: www. Innerbody.com

6.4-Additional texts:

M Hogan J Alvarado, J Wedell WB Saunders Histology of the Human Eye, Philadelphia, 1971 (Photocopies of this text are kept by past Part 1 holders)

J Forrester et al The Eye Basic Sciences in Practice (Chapters 1 and 2)Saunders Company

Ltd London 1996.

ML Barr and JA Kiernan The Human Nervous System, An Anatomical Viewpoint (5th Ed)

Harper and Row, Philadelphia 1988

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc

Course coordinator:

Dr. Khaled gamil

Professor of Ophthalmology

Banha University

Head of Department:

Dr.Essam Elmatbouly

Professor of Ophthalmology

Banha University

Date: 201۳-201۴



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: : Physiology_

(Code) OPTH 603

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Master degree program:** Level: 1st part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no ٣٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** _____ 100 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 1.0 hours/week = 36 total teaching hours
 - **Theoretical: 1.5 hours**
 - **Practical: 0.5 hours**

B) Professional Information:

1- Overall Aim of the Course:

1. to prepare an **ophthalmology** physician oriented with the

Physiology of the eye & vision

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the study of master program in ophthalmology the Graduate should be able to:

- 2.1.1 Mention the function and mechanisms of protection & physiology of the eye
- 2.1.2 know the changes of aqueous humor , intraocular pressure & recognize updated data and researches concerned the eye adnexa and nervous system .
- 2.1.3 understand the physiology of binocular vision and its advantages in addition to the visual pathway & field of vision.

2.2. Intellectual Skills:

By the end of the course, students should be able to:

- 2.2.1 To interpret the physiological function of the eye with changes which happen in diseases.
- 2.2.2 To know the ocular circulation and its relation to the general circulation of the body.
- 2.2.3 Link between given data and problem solving.
- 2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

- 2.3.1 apply the normal physiology of ocular tissues as an organ concerned with vision.
- 2.3.2 observe how the adnexae protect the eye.
- 2.3.3 Assess methods and tools existing in the area of ophthalmology.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

- 2.4.3 Work effectively both individually and in team work .
- 2.4.4 Make effective use of information technology eg, Internet
- 2.4.5 Demonsrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
aqueous humor & intraocular pressure	0.5	1	1.5	6.67
protective mechanisms of the eye	0.5	0.5	1	4.44
accommodation of the eye	0.5	0.5	1	4.44
Normal & abnormal refraction of the Eye	0.5	0.5	1	4.44
pupillary reflexes	0.75	0.5	1.25	5.56
photoreceptors & mechanism of its excitation	1	0.5	1.5	6.67
light & dark adaptation	1.25	0.5	1.75	7.78
color vision	1.25	0.5	1.75	7.78
visual pathway & field of vision	1	1	2	8.89
Binocular muscular coordination	0.75	1.25	2	8.89
visual acuity & factors affecting it	1.25	1.25	2.5	11.11
binocular vision and its advantages & requirements	1	1.25	2.25	9.7

eye movement & its higher control	1.5	1.5	3	13.89
Total	11.25	11.25	22.5	100

4- Teaching and learning methods:

METHODS USED:

4.	Modified Lectures
5.	Small group discussions
6.	Problem solving.

TEACHING PLAN:

Lectures: Division of students into 4 group

1 hour /week, Time from 10.0am to 10:45 am.

Tutorials: 1 hour /week, Time from 11.0am to 11:45 am

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Tutorial	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Total		22.5	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis

	and discussion
Practical examination	To assess descriptive & diagnostic abilities and theory application (intellectual skills) and professional / practical skills & general and transferable skills

5-C) TIME SCHEDULE: Faculty bylaws

- Two sets of exams : 1st in april – 2nd in October.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam:		
a- Written	60	60%
b- Oral	40	40%
Total	100	100%

- The minimum passing & Passing grades (Faculty bylaws).

5-E) Examinassions description:

Examination	Description
1- Final exam:	
a- Written	(Short essay) questions, case study, problem solving
b- Oral	
2- Assignments & other activities	practical books
Total	

6- List of references:

6.1 Course notes: lecture notes prepared by the staff members of the department

6.2- Essential Books (Text Books) : [Francis Heed Adler](#) , [Robert A. Moses](#)

Adler's Physiology of the eye: clinical application 2nd Ed, Mosby 2003

6.3- Recommended Books:

[A. K. Khurana, Indu Khurana](#) **Anatomy & Physiology of Eye, 2nd Ed. New delhi (india) 2008**

6.4: Periodicals, and Web Sites:

American journal of physiology

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc

Course Coordinators: ▪

Dr. Ayman Nasar ▪

Professor of Ophthalmology ▪

Banha University ▪

▪

Head of Department:

Dr. Essam Elmatbouly

Professor of Ophthalmology

Banha University

Date: 201٣-201٤



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: Bacteriology and Pathology.

(Code) OPTH 608

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Master degree of Ophthalmology:** Level: 2nd part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no 3٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 100 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 4 hours/week = 90 teaching hours .
 - **Theoretical: 3 hours**
 - **Practical: 1 hours**

B) Professional Information:

1- Overall Aim of the Course:

1.1- To educate students the basic features of Ocular Microbiology :bacteriology, virology, mycology and parasitolog

1.2- To familiarize students with the common ocular infections, their microbial causes, as well as laboratory diagnosis.

1.3- To familiarize students with the pathologic bases of diseases which affect the eye and ocular adnexae.

1.4- To promote lifelong competencies necessary for continuous professional development .

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

2.1.a-Ocular Microbiology:

2.1.a.1-explain pathogenicity of microorganisms of ocular importance.

2.1.a.2- Describe the morphology, culture and virulence factors of microorganisms of ocular importance.

2.1.b- Ocular Pathology:

2.1.b.1- Define and discuss the main disease categories that may affect the eye and ocular adnexae as well as the basic mechanisms underlying these disorders

(etiology, pathogenesis & natural history) .

2.1.b.2- Describe the morphologic (gross & microscopic) changes occurring as a result of such disease processes in the eye and ocular adnexae.

2.1.b.3- Determine the fate & complications of each particular disease.

2.2. Intellectual Skills:

By the end of the course, students should be able to:

2.2.1 To integrate clinical findings in ophthalmic diagnosis .

2.2.2To formulate proper plans of treatment.

2.2.3 Link between given data and problem solving.

2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

2.3.1 diagnose the gross lesion of different structures of the eye ball and its adnexa.

2.3.2-document the clinical picture with the pathological findings of specimen to reach the proper diagnosis.

2.3.3-differentiate the pathological lesions into inflammatory ,degenerative or malignant

2.3.4-Assess data show slides covering Ocular microbiology and pathology (General & Systemic)

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

2.2.2 Work effectively both individually and in team work .

2.2.3 Make effective use of information technology eg, Internet

2.2.4 Demonstrate self-direction & some originality in taking and solving problem

3- Course contents:

3-A Topics: covered in lectures

I. Ocular microbiology

- Introduction to bacteriology
- Bacteria of ocular importance
 - Staphylococci

- Streptococcus pyogenes & streptococcus pneumonia
- Neisseria
- Corynebacterium diphtheria & diptheroids
- Actinomyces & nocardia
- Pseudomonas aeruginosa & hemophilus
- Moraxella
- Enterobacteriaceae (Proteus, Klebsiella, Escherichia)
- Mycobacterium T.B & treponema palidum
- Chlamydia
- Ocular virology:
 - Introduction to virology
 - Viruses of ocular importance:
 - Herpes simplex & H. zoster
 - Adenovirus
 - Molluscum contagiosum
 - HIV & CMV
- Ocular mycology:
 - Introduction to mycology

- Fungi of ocular importance:
 - Candida albicans
 - Fusarium sp.
 - Aspergillus sp.
- Ocular parasites:
 - Parasites of ocular importance:
 - Protozoa: acanthamoeba, toxoplasma gondii
 - Helminthes: toxocara canis, onchocerciasis (river blindness)
 - Ocular myiasis

II. Ocular pathology

A) General pathology:

1. Introduction, cell injury, accumulations & depositions

- Cell response to injury: degenerative changes, necrosis & apoptosis
- Accumulations, depositions, abnormal calcifications & pigmentations
- Diseases of ageing

2. Inflammation & repair:

- Acute inflammation

- Chronic inflammation
- Repair: regeneration – organization & healing in special conditions

3. Growth disturbances & neoplasia:

- Hyperplasia – metaplasia – dysplasia – hypertrophy – atrophy – hamartoma
- Benign tumors
- Malignant tumors

4. Ocular immunology:

- Immunity & hypersensitivity
- Autoimmunity
- Immunodeficiency

B- Systemic / special pathology:

All diseases in each adnexal or ocular structure are studied covering:

- a) Definition, incidence of disease and its epidemiology
- b) Etiology and pathogenesis
- c) Morphologic aspects: gross & microscopic changes
- d) Fate & complications
- e) Others (clinical presentation, differential diagnosis, prognosis etc...)

Studied adnexal or ocular structures include the following:

1. Eyelid & conjunctiva
2. Lacrimal system & orbit
3. Cornea & sclera
4. Uvea
5. Intraocular tumors
6. Cataract
7. Glaucoma
8. Retina & vitreous
9. Optic nerve
10. Wound healing and ocular trauma
11. Congenital & hereditary ophthalmic disorders & phakomatosis

Subject	Total (hrs)	Lectures (hrs)	Practical (hrs)	% of Total
I- Ocular Microbiology				
Ocular Bacteriology	5	5	10	9%
Ocular Virology	2	2	4	4.44%
Ocular Mycology	2	2	4	4.44%
Ocular Parasites	2	2	4	4.44%
total	11	11	22	24.44%
II. Ocular Pathology				

General Pathology	8	8	16	17.78%
1. Introduction, Cell injury, Accumulations & depositions	2	2	4	4.44%
2. Inflammation & Repair	2	2	4	4.44%
3. Growth Disturbances & Neoplasia	2	2	4	4.44%
4. Ocular Immunology	2	2	4	4.44%
Special Pathology	26	26	52	57.78%
1. Eye lid & Conjunctiva	4	4	8	8.89%
2. Lacrimal system & Orbit	2	2	4	4.44%
3. Cornea and sclera	2	2	4	4.44%
4. Uvea	2	2	4	4.44%
5. Intraocular tumors	4	4	8	8.89%
6. Cataract	2	2	4	4.44%
7. Glaucoma	2	2	4	4.44%
8. Retina and vitreous	2	2	4	4.44%
9. Optic nerve	2	2	4	4.44%
10. Wound healing and Ocular trauma	2	2	4	4.44%
11. Oph. genetic dis. & Phakomatosis	2	2	4	4.44%
Total	45	45	90	100%

4- Teaching and learning methods:

METHODS USED:

7. Modified Lectures
8. Small group discussions
9. Problem solving.
10. Self learning
11. Practical classes
12. Data show slides: anatomy and histology of the eye.

TEACHING PLAN:

Lectures: Division of students into 4 groups

2 hour s /week, Time from 9.0am to 10:30 am

Practical classes 2 hour /week, Time from 11.0am to 12:30 pm

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2 hour</u> /week;each 1.5 hrs	45	50%
Practical	<u>2 hour</u> /week;each 1.5 hrs	45	50%
Total		90	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Practical examination	To assess descriptive & diagnostic abilities and theory application (intellectual skills) and professional / practical skills & general and transferable skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
4- Practical exam	24
5- Final exam	24

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam:		
a- Written	50	50%
b- Practical	20	20%
c- Oral	30	30%
Total	100	100%

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
1- Final exam:	
a- Written	(Short essay) questions, case study, problem solving
b- Practical	Slides
c- Oral	
2- Assignments & other activities	practical books
Total	

6- List of references:

I. Ocular Microbiology

- 1. Ocular therapeutics hand book. A clinical manual. By Bruce E. et al (Ch.1:ocular microbiology & Ch.3: ophthalmologic Lab & diagnostic tests). 2nd edition, 2005, Lippincott Williams & Wilkins.
- 2. Ocular Infection By Seal D. et al. 2nd edition, 2007, Informa Health Care USA.

II. Ocular Pathology

- 1. Ocular Pathology Text book by Yanoff M.
- 2. Ophthalmic Pathology: An Atlas , Textbook by **Spencer W H**
- 3. Ophthalmic Pathology – An illustrated guide for Clinicians
By Sehu KW and Lee WR - Blackwell Publishing.
- 4. Principles and Practice of Ophthalmology by Albert DM. Jakobiec FA. Vol.4

❖ Related web sites

- <http://uuhsc.utah.edu/MoranEyeCenter/opatharch/>
- <http://pathmicro.med.sc.edu/book/welcome.htm>

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids, Models etc

Course Coordinators:

Dr. Tarek Mohammad Zaghloul

Professor of Ophthalmology
Banha University

Head of Department:

Dr.Essam Elmatbouly

Professor of Ophthalmology
Banha University

Date: 201٣-201٤



Benha University
Faculty of Medicine
Department of Ophthalmology.
 Course Specification
Course title: : General Medicine for postgraduates

(Code) MED 503

Academic Year (201۳-201۴)

- **Department offering the course:** General Medicine department
- **Master degree program:** Level: 1st part
- **Date of specification approval:**
- **Department council,**date ۱/۹/201۳
 - **Faculty council no** 3۰۶ , **date** ۱۰/۹/201۳

A) Basic Information:

- **Allocated marks:** _____ 100 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 1.0 hours/week = 36 total teaching hours

	teaching Hours / week	Total teaching hours
1- Lectures	0.75 hour	11.25
2- Small group teaching / tutorials	0.25 hour	11.25
Total	1.0	22.5

B) Professional Information:

1- Overall Aim of the Course:

2. to prepare an **ophthalmology** physician oriented with the medical disorders related to the eye & vision

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the study of master program in medical disorders related to ophthalmology the Graduate should be able to:

- 2.1.1 Know sound knowledge about medical disorders affecting eye

- 2.1.2 know the diabetic changes retina, hypertensive emergencies and cardio-pulmonary resuscitation
- 2.1.3 understand the pathophysiology autoimmune diseases affecting the eye

2.2. Intellectual Skills:

By the end of the course, students should be able to:

- 2.2.1 To interpret the pathophysiological functions of the eyes and its changes due to systemic diseases
- 2.2.2 To know the ocular circulation and its relation to the general circulation of the body.
- 2.2.3 Link between given data and problem solving.
- 2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

- 2.3.1 know the normal homeostasis of the body.
- 2.3.2 know how to control medical emergencies
- 2.3.3 Assess methods and tools existing in the area of ophthalmology.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

- 2.2.5 Work effectively both individually and in team work .
- 2.2.6 Make effective use of information technology eg, Internet
- 2.2.7 Dementsrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
Neuroophthalmology basics	0.5	1	1.5	6.67
Medical emergencies	0.5	0.5	1	4.44

Pupillary disorders	0.5	0.5	1	4.44
Cranial nerve palsies	0.5	0.5	1	4.44
pupillary reflexes	0.75	0.5	1.25	5.56
Examination of a comatosed patient	1	0.5	1.5	6.67
Interpretation of tendon reflexes with medical disorders	1.25	0.5	1.75	7.78
Diabetic retinopathy	1.25	0.5	1.75	7.78
Hypertensive retinopathy	1	1	2	8.89
Other causes of retinopathies	0.75	1.25	2	8.89
Uveitis and ophthalmology	1.25	1.25	2.5	11.11
Disorders of bone and rheumatology	1	1.25	2.25	9.7
eye movement & its higher control	1.5	1.5	3	13.89
Total	11.25	11.25	22.5	100

4- Teaching and learning methods:

METHODS USED:

- 13.Modified Lectures
- 14.Small group discussions
- 15.Problem solving.

TEACHING PLAN:

Lectures: Division of students into 4 group

1 hour /week, Time from 10.0am to 10:45 am .

Tutorials: 1 hour /week, Time from 11.0am to 11:45 am

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Tutorial	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Total		22.5	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Practical examination	To assess descriptive & diagnostic abilities and theory application (intellectual skills) and professional / practical skills & general and transferable skills

5-C) TIME SCHEDULE: Faculty bylaws

- Two sets of exams : 1st in april – 2nd in October.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam: a- Written	60	60%
b- Oral	40	40%
Total	100	100%

- The minimum passing & Passing grades (Faculty bylaws).

5-E) Examinassions description:

Examination	Description
1- Final exam: a- Written b- Oral	(Short essay) questions, case study, problem solving
2- Assignments & other activities	practical books
Total	

6- List of references:

6.1 Course notes: lecture notes prepared by the staff members of the department

6.2- Essential Books (Text Books) : Kumar and Clark, Davidson's general medicine

6.3- Recommended Books:
Oxford book of general medicine

6.4: Periodicals, and Web Sites:
American journal of Medicine

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc
- **Course Coordinators:**
- **Prof Fawzi Megahed**
- Professor of Internal Medicine
- Banha University
-

Head of Department:

Prof. Dr. Mohammed Shawky

Professor of Internal Medicine

Banha University

Date: 201۳-201۴



**Benha University
Faculty of Medicine
Department of Ophthalmology.**

Course Specification

Course title: : General Surgery__for postgraduates

(Code) Sur 603

Academic Year (201٣-201٤)

- **Department offering the course:** Surgery department
- **Master degree program:** Level: 1st part
- **Date of specification approval:**
 - Department council ,date ١/٩/201٣
 - Faculty council no 3٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** _____ 100 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 1.0 hours/week = 36 total teaching hours

	teaching Hours / week	Total teaching hours
1- Lectures	0.75 hour	11.25
2- Small group teaching / tutorials	0.25 hour	11.25
Total	1.0	22.5

B) Professional Information:

1- Overall Aim of the Course:

3. to prepare an **ophthalmology** physician oriented with the surgical disorders affecting the eye

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the course, students should be able to:

- 2.1.1 Mention main treatment of acute shocked patient
- 2.1.2 explain the changes hemodynamics and surgical emergencies and infection
- 2.1.3 describe the pathophysiology different diseases affecting the eye.

2.2. Intellectual Skills:

By the end of the course, students should be able to:

- 2.2.1 interpret the pathophysiological functions of the eyes and its changes due to surgical diseases
- 2.2.2 know the head and neck emergencies and its relation to the general circulation of the body.
- 2.2.3 Link between given data and problem solving.
- 2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

- 2.2.1 manage the acute emergencies and life saving maneuvers
- 2.2.2 Practice manual minor surgical procedures related to the eye and adnexae
- 2.2.3 Practice proper usage of fluids and blood transfusion.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

- 2.2.8 Work effectively both individually and in team work .
- 2.2.9 Make effective use of information technology eg, Internet
- 2.2.10 Demonsrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
Emergencies in head and neck	0.5	1	1.5	6.67
Blood transfusion techniques	0.5	0.5	1	4.44
Management of acute shocked patient	0.5	0.5	1	4.44
Management of lid abcess	0.5	0.5	1	4.44
Acute pneumothorax	0.75	0.5	1.25	5.56
Shock with dyspnea	1	0.5	1.5	6.67
Care of the comatosed patient	1.25	0.5	1.75	7.78
Rules of TPN	1.25	0.5	1.75	7.78
Rules of management of polytraumatized patient	1	1	2	8.89
Acute increased ICT	0.75	1.25	2	8.89
Sudden loss of consciousness	1.25	1.25	2.5	11.11
Pathology of tissue response to trauma	1	1.25	2.25	9.7
Operating Theater rules	1.5	1.5	3	13.89
Total	11.25	11.25	22.5	100

4- Teaching and learning methods:

METHODS USED:

- | |
|-----------------------------|
| 16. Modified Lectures |
| 17. Small group discussions |
| 18. Problem solving. |

TEACHING PLAN:

Lectures: Division of students into 4 group

1 hour /week, Time from 10.0am to 10:45 am.

Tutorials: 1 hour /week, Time from 11.0am to 11:45 am

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Tutorial	<u>1 hour</u> /week; 3/4 hour	11.25	50%
Total		22.5	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Practical examination	To assess descriptive & diagnostic abilities and

	theory application (intellectual skills) and professional / practical skills & general and transferable skills
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5-C) TIME SCHEDULE: Faculty bylaws

- Two sets of exams : 1st in april – 2nd in October.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam: a- Written	60	60%
b- Oral	40	40%
Total	100	100%

- The minimum passing & Passing grades (Faculty bylaws).

5-E) Examinassions description:

Examination	Description
1- Final exam: a- Written b- Oral	(Short essay) questions, case study, problem solving
2- Assignments & other activities	practical books
Total	

6- List of references:

- 6.1 Course notes: lecture notes prepared by the staff members of the department
- 6.2- Essential Books (Text Books) : Skandalakis surgery book
- 6.3- Recommended Books: Oxford book of surgery
Current Series , General Surgery
- 6.4: Periodicals, and Web Sites:
American journal of physiology

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:

- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc
- **Course Coordinators:**
- **Dr. Ayman Nasar**
- Professor of Ophthalmology
- Banha University
-

Head of Department:
Prof. Essam El Matbouly
Professor of Ophthalmology
Banha University

Date: 201٣-201٤



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: Optics of the eye

(Code) OPTH 602

Academic Year (201^٣-201^٤)

- **Department offering the course:** Ophthalmology department
- **Master degree program:** Level: 1st part
- **Date of specification approval:**
 - Department council, date: ١/٩/201٣
 - Faculty council no 3٥٦ , date: ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 100 marks
- **Course duration:** 15 weeks of teaching
- **Teaching hours:** 2 hours/week = 45 total teaching hours
 - **Theoretical: 1.5 hours**
 - **Practical: 0.5 hours**

B) Professional Information:

1- Overall Aim of the Course:

The broad aim of the course is to educate students about Optics of the Eye also to provide the students with updated data and researches concerned the eye, including the application of physical, geometric and physiological optics to clinical management and an appreciation of the principles of instrumentation and clinical practice in these areas.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the course, students should be able to:

2.1.1- Describe the physical properties of light and lasers

2.1.2- Describe the geometrical principles of light and the laws governing lights interaction with materials.

2.1.3-Describe the physiological optics of the human eye and optical instruments and how to test this.

2.2. Intellectual Skills:

By the end of the course, students should be able to:

2.3.1 To integrate clinical findings in ophthalmic diagnosis .

2.3.2 To formulate proper plans of treatment.

2.3.3 Link between given data and problem solving.

2.3.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the course, students should be able to:

2.3.1-Master of the basic and modern professional clinical skills in the area of optics and refraction.

2.3.2-Assess methods and tools existing in the area of ophthalmology.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

- 2.2.11 Work effectively both individually and in team work .
- 2.2.12 Make effective use of information technology eg, Internet
- 2.2.13 Demonsrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Total (hrs)	% of Total
Properties of light	0.5	0.5	1	2.08%
Reflection of light	0.5	0.5	1	2.08%
Refraction of light	0.5	0.5	1	2.08%
Prisms	0.75	0.75	1.5	3.13%
Refraction by lenses	0.75	0.75	1.5	3.13%
Refraction of the eye	1	0.75	1.75	4.17%
Aberrations	0.75	1	1.75	4.17%
Ametropia	1.25	1.25	2.5	5.21%
Accommodation	1	0.75	1.75	4.17%
Binocular muscular coordination	0.75	1	1.75	4.17%
Retinoscopy	0.75	1	1.75	4.17%
Ophthalmoscopy	1	0.75	1.75	4.17%
Verification of refraction	1.5	1.25	2.75	6.25%
Spectacles	1.25	1.5	2.75	6.25%
Contact lenses	1.5	1.25	2.75	6.25%
Intraocular lenses	1.25	1.5	2.75	6.25%
Low vision aids	1	0.75	1.75	4.17%
Ophthalmoptic instruments: Microscopy , operating microscope , Slit Lamp ,	6	6.25	12.25	27.08%

Fundus Camera Refractometers , Keratometers , Orthoptic, and laser				
Total	22.5	22.5	45	100%

4- Teaching and learning methods:

METHODS USED:

19. Lectures
20. Small group discussions
21. Workshops
22. Practical classes: Data show slides: optics of the eye.
23. Seminars
24. Tutorial

TEACHING PLAN:

Lectures: Division of students into 2 groups

1 hour /week, Time from 9.0am to 10:30 am .

Tutorials: 1 hour /week, Time from 10.0am to 11:30 am

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1 hour</u> / week;each 1.5 hr	22.5	50%
Tutorial	<u>1 hour</u> / week;each 1.5 hr	22.5	50%
Total		45	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Practical examination	To assess descriptive & diagnostic abilities and theory application (intellectual skills) and professional / practical skills & general and transferable skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
4- Practical exam	24
5- Final exam	24

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam:		
a- Written	50	50%
b- Practical	25	25%
c- Oral	2 ^o	2 ^o %
Total	100	100%

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinassions description:

Examination	Description
1- Final exam: a- Written	(Short essay) questions, case study, problem solving

b- Practical c- Oral	
2- Assignments & other activities	practical books
Total	

6- List of references:

6.2- Essential Books (Text Books)

6.1 Course notes: lecture notes prepared by the staff members of the department

6.2- Essential Books (Text Books)

Alrefaay clinical optics of the eye, 2009

6.3- Recommended Books

Clinical Optics AR Elkington and HJ Frank, Blackwell Science, 3rd Ed, 2000

Optics, Refraction and Contact Lenses, Basic and Clinical Science Course, American Academy Ophthalmology, 2003

Optics MH Freeman, Butterworths-Heinemann Medical; 10th Ed, 1990

Optics for Clinicians M Rubin, Triad Publishing, 3rd Ed, 1993

6.4: Periodicals, and Web Sites:

American journal of optics and refraction

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls: available in the department
- Small group classes
- Information technology / audio visual aids
- Models etc

Course Coordinators:

Dr. Essam El Matbouly Professor of Ophthalmology Banha University

Head of Department:

Dr. Essam Elmatbouly Professor of Ophthalmology Banha University

Date: 201۳-201۴



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: Medical Ophthalmology

(Code) OPTH 606

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Master degree program:** Level: 2nd part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no 3٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 30 weeks of teaching
- **Teaching hours:** 5 hours/week = 432 total teaching hours
 - **Theoretical: 3 hours**
 - **Practical: 2 hours**

B) Professional Information:

1- Overall Aim of the Course:

By the end of the course, students should be able to:

- 1.a- Deal with common ophthalmological conditions on the basis of adequate history taking, physical examination interpretation of relevant supportive investigations and Management.
- 1.b- Deal with ocular emergencies.
- 1.c- Perceive and integrate progress in ophthalmological technology.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the course, students should be able to:

- 2.1.1 list items of History taking (complaint, history of present illness and its chronicity)
- 2.1.2 describe the symptoms of which an ophthalmic patient complain & its analysis
- 2.1.3 describe the signs and manifestations of ophthalmic diseases .
- 2.1.4 explain the ocular manifestations of general medical diseases (D.M, HTN , Thyrotoxicosis)
- 2.1.5 Enumerate concepts in the common diagnostic & laboratory techniques necessary to establish diagnosis of ophthalmic illnesses .
- 2.1.6 Describe the various therapeutic methods and other alternative use.
- 2.1.7 mention the principles and fundamentals of prevention control and avoiding further complications
- 2.1.8 identify the principles , basics and ethics of scientific research .

2.2. Practical and Professional Skills

By the end of the course, students should be able to:

- 2.2.1 Use of different primary methods of examination and slit lamp ,staining of the cornea , shirmer's test, IOP measurement, gonioscopy, AC depth measurement.
- 2.2.2 Use of direct and indirect ophthalmoscope and interpretation of fundus picture .
- 2.2.3 Interpretation of clinical findings with the history of the patient illness.
- 2.2.4 differentiate between ophthalmological symptoms and other medical diseases .
- 2.2.5 Ask for further investigations and laboratory test to help in reaching the proper diagnosis.
- 2.2.6 observe the differential diagnosis of such illnesses .
- 2.2.7 establish a definitive clinical diagnosis and initiating appropriate treatment.

2.2.8 Sort out ocular diseases early in the course of the evaluation of importance for avoiding unnecessarily and often expensive investigations.

2.3. Intellectual Skills:

By the end of the course, students should be able to:

2.3.4 To integrate clinical findings in ophthalmic diagnosis .

2.3.5 To formulate proper plans of treatment.

2.3.6 Link between given data and problem solving.

2.3.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

2.2.14 Work effectively both individually and in team work .

2.2.15 Make effective use of information technology eg, Internet

2.2.16 Demonstrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
Introduction: Ocular Symptoms and Signs	0.75	0.75	0.75	2.25	1.65
Diseases of the eye lids: blepharitis, allergy, lid retraction, madarosis, blepharospasm, infections	2	1	1	4	3.01
Disease of the Cornea: Keratitis (Bacterial,	3	2	2.25	7.25	5.32

Viral, Mycotic), pigmentation, precipitates, peripheral corneal disorders, degenerations, dystrophies, ectasia					
Diseases of the conjunctiva: conjunctivitis (Bacterial, Viral, Chlamydial, Allergic) Mucocutaneous disorders, dry eye	4	2.75	3	9.75	7.18
Diseases of the lacrimal apparatus: dacryoadenitis, dacryocystitis, canaliculitis	6	3.50	3.25	12.7 5	9.49
Glaucomas: ocular hypertension, primary open angle glaucoma, normotensive glaucoma, primary angle closure glaucoma, secondary open angle glaucoma, secondary angle closure glaucoma, infantile & juvenile glaucoma	10	5.25	5	20.2 5	15.0 5
Diseases of Sclera : Scleritis- Episcleritis	3	2	2.25	7.25	5.32
Disease of Uvea: Uveitis (Infective, Non-infective, Chronic)	6	4	3	13	9.72
Diseases of Retina : Dystrophies (Receptors, Retinal pigment epithelium & Choroidal (Degenerations Vascular: Retinopathies (Diabetic, Hypertensive, Renal, Toxaemia, Arteriosclerotic), retinal artery occlusion & retinal vein occlusion	6	2.25	3	11.2 5	8.33
Diseases of optic nerve: Neuropathy, Neuritis, Papilledema, congenital.	4	3	3.75	9.75	7.18
Strabismus: amblyopia, clinical evaluation, horizontal & vertical patterns, alphabet patterns	4	2.25	2.5	8.75	6.48
Disease of the orbit: thyroid eye diseases, infections, inflammations	4	2	2	8	6.02
Diseases of Macula: age related macular degeneration, central serous chorio retinopathy, Cystoid macular oedema, .Maculopathies	3	2.25	2.25	7.5	5.56
Systemic diseases and the eye: Metabolic (Diabetes- Gout)- Hypovitaminosis- Endocrinal (Pituitary- Thyroid- Parathyroid- Thymus)- Blood diseases- Collagen diseases (systemic lupus erythematosus – rheumatic arthritis - Giant cell arteritis)- Chronic granulomatous diseases (Tuberculosis , syphilis,	2	1.5	1.5	5	3.7

Leprosy & Sarcoidosis)- Phacomatosis- Muscular diseases.					
Neuro-ophthalmology (pupillary anomalies, nystagmus, ophthalmoplegia, migraine, brain stem syndromes, optic atrophy & chiasmal lesions)	2	1.5	1	4.5	3.24
Ocular therapeutic	1	1.25	1.5	3.75	2.78
Total	45	45	45	135	100

4- Teaching and learning methods:

METHODS USED:

25. Modified Lectures
26. Small group discussions
27. Problem solving.
28. Practical classes
29. Data show slides

TEACHING PLAN:

Lectures: Division of students into 6 groups

2 hour /week, Time from 9.0am to 10.30 am

Tutorials: 1 hour /week, Time from 11.0am to 2.0 pm

Practical classes: 1 hour /week, Time from 11.0pm to 2.0 pm

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>3 hour /week</u>	45	33.33%
Practical	<u>1 hour / week</u>	45	33.33%
Tutorial	<u>1 hour / week</u>	45	33.33%
Total		135	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge & understanding, intellectual skills
Oral examination	To assess knowledge & understanding, skills of analysis and discussion
Practical examination	To assess descriptive & diagnostic abilities and theory application (intellectual skills) and professional / practical skills & general and transferable skills

5-C) TIME SCHEDULE: Faculty bylaws

Exam	Week
1- written exam	Allowed 48 weeks after complete passing the 1 st part.
2- Practical exam	After the written exam
3- Essay	24 weeks after complete passing the 2 nd part.
4- Assignments & other activities	Conferences, scientific meeting & work shops.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam:		
a- Written	150	50%
b- Practical	75	25%
c- Oral	75	25%
Total	300	100%

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

5-E) Examinations description:

Examination	Description
1- Final exam: a- Written b- Practical c- Oral	(Short essay) questions, case study, problem solving Slides, case examination, diagnosis, interpretation & investigations
2- Assignments & other activities	practical books
Total	

6- List of references:

6.1- Course Notes

Lecture notes prepared by staff members in the department

6.2- Essential Books (Text Books)

- **Jack J. Kanski, Brad Bowling** Clinical Ophthalmology: A Systematic Approach
Kanski textbook of ophthalmology 7th Ed. Elsevier 2011
- **Myron Yanoff, Jay S. Duker** Ophthalmology: Expert Consult, Yanoff, Ophthalmology
3rd Ed. Mosby 2008

6.3- Recommended Books:

- **William Tasman, Edward A. Jaeger** Duane's Ophthalmology
Duane's clinical ophthalmology, Wolters Kluwer 2013
- Bruce E. Onofrey, Leonid Skorin, Jr., Nicky R. Holdeman **Ocular Therapeutics Handbook: A Clinical Manual**, Lippincott Williams & Wilkins, 2005

6.4- periodicals and websites:

- British Journal of ophthalmology bjo.bmj.com
- American journal of ophthalmology www.ajo.com

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Lecture halls:
- Small group classes
- Laboratory
- Information technology / AV aids
- Models etc

Course Coordinators:

Dr. Ayman Nassar

Professor of Ophthalmology
Banha University

Head of Department:

Dr . Essam Elmatbouly

Professor of Ophthalmology
Banha University

Date: 201٣-201٤



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: ophthalmic surgery

(Code) OPTH 607

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Master degree program:** Level: 2nd part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no 3٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 30 weeks of teaching
- **Teaching hours:** 5 hours/week = 135 total teaching hours
 - **Theoretical: 3 hours**
 - **Practical: 2 hours**

B) Professional Information:

1- Overall Aim of the Course:

By the end of the course, the candidate should be able to:

1.a- Deal with common ophthalmological conditions on the basis of adequate history taking, physical examination interpretation of relevant supportive investigations and management.

1.b- Surgical management of ocular emergencies.

1.c- Know and perform surgical management of common ophthalmological diseases .

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

By the end of the course, students should be able to:

2.1.1 list items of History taking (complaint, history of present illness and its chronicity)

2.1.2 describe the symptoms of which an ophthalmic patient complain & its analysis

2.1.3 describe the signs and manifestations of ophthalmic diseases .

2.1.4 discuss the ocular manifestations of general medical diseases (D.M, HTN , Thyrotoxicosis)

2.1.5 Enumerate concepts in the common diagnostic & laboratory techniques necessary to establish diagnosis of ophthalmic illnesses .

2.1.6 Describe the various therapeutic methods and other alternative use.

2.1.7 identify different surgical principles to correct different surgical problems.

2.1.8 explain the principles , basics and ethics of scientific research.

2.2. Intellectual Skills:

By the end of the course, students should be able to:

2.2.1 integrate clinical findings in ophthalmic diagnosis .

2.2.2.formulate proper plans of treatment.

2.2.3Link between given data and problem solving.

2.2.4 Demonstrate competence in data presentation , statistical analysis & interpretation .

2.3. Practical and Professional Skills

By the end of the study of master program in ophthalmology the Graduate

should be able to *By the end of the course, students should be able to:*

- 2.3.1 Use of different primary methods of examination and slit lamp ,staining of the cornea , shirmer's test, IOP measurement, gonioscopy, AC depth measurement.
- 2.3.2 Use of direct and indirect ophthalmoscope and interpretation of fundus picture .
- 2.3.3 Interpretation of clinical findings with the history of the patient illness.
- 2.3.4 differentiate between ophthalmological symptoms and other medical diseases .
- 2.3.5 Ask for further investigations and laboratory test to help in reaching the proper diagnosis.
- 2.3.6 Know the differential diagnosis of such illnesses .
- 2.3.7 establish a definitive clinical diagnosis and initiating appropriate treatment.
- 2.3. practice different techniques in removal of pterygium and chalazion,cataract and glaucoma surgery and retinal detachment correction.
- 2.3.9 deal with traumatic injuries of the eye and orbit.
- 2.3.10 deal with chemical injuries of the eye and adnexa.

2.4. Communication skills & transferable Skills:

By the end of the course, students should be able to:

- 2.2.17 Work effectively both individually and in team work .
- 2.2.18 Make effective use of information technology eg, Internet
- 2.2.19 Demonstrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total teaching (hrs)	% of Total
General principles of ocular Surgery (sutures,needles,instruments)	2	2	1.5	5.5	4.17
Sterilization and	2	1	1.25	4.25	3.24

Disinfection(methods used & its principle)					
Ocular anesthesia (peribulbar,retrobulbar,etc)	3	2.25	2	7.25	5.32
surgical diseases of eye Lids(Ectropion,entropion,etc)	4	4	4.25	12.25	9.03
Surgical diseases of the Cornea(perforated corneal ulcer,keratoconus,keratoplasty,corneal& anterior segment trauma&conj.flap surgery)	4	4.75	5	13.75	10.19
Surgical diseases of the Conjunctiva(symblepharon,pterygium)	5	4.5	4.5	14	10.42
Surgical disease of the lacrimal system (dacryocystitis,lacrimal fistula)	2.25	2	2	27	6.25
Surgical diseases of the Lens(cataract,aphakia,sub- laxation,IOLs,pediatric cataract surgery,postop.care and phaco complications)	4.75	5	5	14.75	10.88
Surgical management of Glaucoma (Penetrating,non penetrating,aqueous tube shunts,coincident cataract&glaucoma surgery,surgical ttt for developmental glaucoma,laser trabecuplasty&PI&cyclophotocoagul ation)	4	3.5	3	10.5	7.87
Surgical diseases of the Retina & vitreous : Principals of VRsurgery. Application of intravitreal drugs. Endophthalmitis diagnosis&ttt. AMD&macular hole surgery. PP lensectomy for retained lens material.	3	4	4.25	11.25	8.33
Refractive surgery : LASIK pt evaluation & selection. Laser technology(Excimer&Femto). Surface ablation :PRK,LASEK,&Epi-LASIK LASIK for	3	2.5	3	8.5	6.25

myopia,hyperopia&astigmatism. Phakic IOL. Refractive lens exchang. Biomechanics in refractive surgery.					
Strabismus (Esotropia,exotropia,clinical evaluation,management,special syndromes)	3	2.75	3	8.75	6.48
Surgical diseases of the orbit: Surgical approaches to the orbit. Surgical rehabilitation of Graves”Orbetopathy. Enucleation&evisceration. Manegment of post-enucleation socket syndrome.	3	2	2.75	7.75	5.79
Surgical management of ocular trauma(rupture globe,lid trauma,IOFB)	3	2.75	2	7.75	5.79
Total	45	45	45	135	

4- Teaching and learning methods:

METHODS USED:

30. Modified Lectures
31. Small group discussions
32. Problem solving.
33. Practical classes
34. Data show slides

TEACHING PLAN:

Lectures: Division of students into 4 groups

2 hour/week, Time from 9.0am to 10.30 am .

Tutorials: 1 hour/week, Time from 11.0am to 2.0 pm

Practical classes 1 hour/week, Time from 11.0 am to 2.0 pm

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2 hour</u> /week; 1½ hours each	45	33.33%
Practical	<u>one hour</u> /week; 3 hours	45	33.33%
Tutorial	<u>One hour</u> /week; 3 hours	45	33.33%
Total		135	100%

5- Students Assessment methods:**5-A) ATTENDANCE CRITERIA:**

The minimum acceptable attendance is 75%, Students who fail to meet their attendance requirements are not allowed to sit for their exams.

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5-C) TIME SCHEDULE: Faculty by laws

- Two sets of exams : 1st in April – 2nd in October.

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- Final exam: a- Written	150	50%

b- Practical	75	25%
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Total	300	100%

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FORMATIVE ASSESSMENT:

Student knows his marks after the Formative exams.

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3rd Ed. Mosby 2008
- **George L. Spaeth** Ophthalmic surgery: principles and practice 3rd Ed. Elsevier Health Sciences, 2003
- **Norman S. Jaffe, Mark S. Jaffe, Gary F. Jaffe** Cataract Surgery And Its Complications 6th Ed. Mosby 1997
- **Robert L. Stamper, Marc F. Lieberman, Michael V. Drake** Becker-Shaffer's Diagnosis and Therapy of the Glaucomas 8th Ed. Elsevier Health Science
- **Frederick Hampton Roy, Carlos W. Arzabe, Master Techniques in Cataract and Refractive Surgery** Slack Incorporated, 2004

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Facilities used for teaching this course include:

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Course Coordinators

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