

جامعة بنها
كلية الطب البشرى
قسم طب وجراحة العين

توصيف برنامج الدبلوم (عام ٢٠١٤-٢٠١٣)

PROGRAM SPECIFICATION

1- معلومات أساسية : Basic information

- ١ - اسم البرنامج : دبلوم طب وجراحة العين
- ٢ - طبيعة البرنامج : (مشترك)
- ٣- الأقسام المسؤولة عن البرنامج:
القسم المانح للدرجة : قسم طب وجراحة العين
الأقسام المشاركة : الباطنة العامة – النفسية والعصبية - الجراحة العامة
- ٤- تاريخ إقرار البرنامج فى مجلس القسم : ١ / 9 / 2013
- ٥- تاريخ إقرار البرنامج فى مجلس الكلية: 15/ 9 / 2013
- ٦- مسئول البرنامج:

Prof. Dr. Tarek Zaghlol Prof. of ophthalmology

٧- المراجعة الداخلية للبرنامج:

Prof. Dr. Ayman Nassar Prof. of ophthalmology

٨- المراجعة الخارجية:

Prof Dr. Abdelkhalek Elsaadany, prof. of ophthalmology, Menofia

university

2- معلومات متخصصة: Professional information

١ - الأهداف العامة للبرنامج :

1- Program aims:

The overall aims of the program are:

- 1-1 **Using** the knowledge he acquired during ophthalmic study and applying it in his practice
- 1-2 **Dealing** with ophthalmic challenges and providing solutions
- 1-3 **Mastering** ophthalmic practical skills and applying recent technology in this field
- 1-4 **Communication** abilities and leading a teamwork
- 1-5 **Making** proper decisions based on the available data
- 1-6 **Efficient** use of the available resources
- 1-7 **Awareness** of his role in community development
- 1-8 **Committing** ethical behavior
- 1-9 **Awareness** of self progress and continuous 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** basics, theories and essential knowledge in ophthalmic practice and related sciences.

2-a-2 **Recognize** ethical and legal aspects in ophthalmic practice.

2-a-3 **Know** essentials of quality management in ophthalmic field.

2-a-4 **Illustrate** effect of ophthalmic practice on surrounding community and environment.

٢.ب - القدرات الذهنية :

2.b. Intellectual Skills:-

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

- 2-b-1 *Analyze challenges in ophthalmic practice*
2-b-2 *Solve problems in ophthalmic field*
2-b-3 *Analyze ophthalmic scientific research*
2-b-4 *Distinguish risks in ophthalmic field*
2-b-5 *Develop decisions based on available information*

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** practical skills in ophthalmic field
2-c-2 **Write** practical reports

٢.د . مهارات عامة ومنتقلة :

2.d. General and transferable skills:-

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

- 2-d-1 **Use** active communication by its different means.
2-d-2 **Use** information technology to develop his practice.
2-d-3 **Establish** self assessment and specifying needs.
2-d-4 **Use** different resources to gather data.
2-d-5 **Work** in a team and manage time.
2-d-6 **Lead** a team in ophthalmic practice.
2-d-7 **Establish** continuous self learning.

٣ - المعايير الأكاديمية المرجعية :

3. Academic Standards:

- **Academic Reference Standards (ARS) of Diploma Program of Ophthalmology, approved in department date 2 / 6 / 2013, and in faculty(no) 354 date 16/6/2013 (ملحق ١)**

4- Reference standards

- العلامات المرجعية:

a) المعايير القياسية لبرامج الدراسات العليا (درجة الماجستير) الصادرة عن الهيئة القومية لجودة التعليم والإعتماد (مارس ٢٠٠٩)

a) **Academic reference standards (ARS) , Master Program (March 2009)**
, which were issued by the National Authority for Quality Assurance
& Accreditation of Education **NAQAEE (ملحق ٢)**

5 - هيكل ومكونات البرنامج :

(5): **Curriculum structure and contents:**

أ - مدة البرنامج : ٧٢ weeks **Program duration**

- ✚ **1st part:** - One Semester (6 months).
- ✚ **2nd part:** - Two Semester (1 year).

ب - هيكل البرنامج : **Program structure**

- **Total hours of program** 40 credit hours
- **Theoretical:** 15 ¾ hours
- **Practical:** 24 ¼ hours

ج - مستويات ومقررات البرنامج : **levels and courses of the program**

الزامي compulsory

الساعات المعتمدة	الكود	المقرارات	البند
6	Univ 601	متطلبات الجامعة والكلية	
9	2	Opth 601	الجزء الأول
	2	Opth 602	
	1	Oph 603	
	2	Oph 604	
	2	Oph 605	Internal medicine & neuro-psychiatry
5			كراسة الانشطة
	5	Oph 606	الجزء الثاني
	5	Oph 607	
	4	Oph 608	Microbiology & pathology
٤٠			الاجمالي

ج: خطة التدريس: Teaching plan

First part (٢٤ weeks duration/6 months)

a- Compulsory courses:

		Number s of hours per week			total teaching hours
		Lectures	practical	tutorials	
Anatomy	Oph 601	١,٥		١,٥	72

optics	Ophth 602	1.5	1.5	72
physiology	Ophth 603	3/4	3/4	36
General surgery	Ophth 604	1.5	1.5	72
Internal medicine & neuro-psychiatry	Ophth 605	1.5	1.5	72
Total:				324

b- Elective courses: none

c-selective courses:none

Second part (24 weeks duration/12 months)

a- Compulsory courses:

Course Title	Course Code	NO. of hours per week			Total teaching hours
		lectures	practical	tutorials	
Medical ophthalmology	Ophth 606	3	3	3	432
Ophthalmic surgery	Ophth 607	3	3	3	432
Microbiology & pathology	Ophth 608	3	3		288

Total:			1152
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b- Elective courses: none

c- selective courses:none

6- محتويات المقررات (راجع توصيف المقررات)

7- متطلبات الإلتحاق بالبرنامج :

(7): Program admission requirements:

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

(١)

- أ- أن يكون حاصلًا على درجة البكالوريوس فى الطب والجراحة من احدى جامعات ج.م.ع أو على درجة معادلة لها من معهد علمى 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 فى درجة البكالوريوس.
- ت- يسمح للحاصل على الدبلوم وعلى خلاف لنظام هذه اللائحة أن يسجل لدرجة الماجستير بشرط أن يكون تقديره فى الدبلوم لا يقل عن جيد وبغض النظر عن تقديره فى البكالوريوس.

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

(٣) أن يتفرغ للدراسة لمدة سنة على الأقل فى الجزء الثانى (فصلين دراسيين)

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

- تبدأ الدراسة لدرجة الدبلوم فى 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 التفصيلى 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 اكلينيكى 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 الآلى (دورة فى مقدمة الحاسب – دورة تدريبية متوسطة – دورة فى تطبيقات الحاسب الآلى) 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 المتحقين 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.4 And from 2.b.1 to 2.b.5
2	Oral examination	To assess knowledge and understanding, intellectual skills & General & transferable skills From 2.a.1 to 2.a.4 ,from 2.b.1 to 2.b.5 And from 2.c.1 to 2.c.2 And from 2.d.1 to 2.d.4
3	Practical examination	To assess knowledge and understanding, intellectual skills, professional General & transferable skills From 2.a.1 to 2.a.4 ,from 2.b.1 to 2.b.5 And from 2.c.1 to 2.c.2 And from 2.d.1 to 2.d.4

Final exam:

First part

إجمالي	الدرجة				الاختبار	المقرر
	إكلينيكي	عملي	نظري	تحريري		
100			40	60	اختبار تحريري مدته ثلاث ساعات + اختبار شفوي	التشريح
100			40	60	اختبار تحريري مدته ثلاث ساعات + اختبار شفوي	الفسيولوجي
100		25	25	50	اختبار تحريري مدته ثلاث ساعات + اختبار شفوي وعملي	البيروية

٥٠		٢٥	٢٥	اختبار تحريري وشفهي	الباطنة العامة
٥٠		٢٥	٢٥	اختبار تحريري وشفهي	الجراحة العامة
٤٠٠	إجمالي الدرجة				

Second part

إجمالي	الدرجة				الاختبار	المقرر
	عملي	إكلينيكي	شفهي	تحريري		
٣٠٠	٧٥		٧٥	١٥٠	اختبار تحريري ثلاث ساعات + اختبار شفهي 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	Sample
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	استبيان	<u>All</u>
Alumni الخريجون	استبيان	<u>Not less than 50% from the last 3 years</u>

Stakeholder (s) أصحاب العمل	امتهيان	Representative samples from all sectors
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**

المسئول عن البرنامج : أ.د طارق زغلول التوقيع التاريخ : ٢٠١٣/٩/١

Program Coordinator:

Name Dr. Tarek Zaghlol
٢٠١٣/٩/١.....

Signature.....

Date

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



الملحقات :

ملحق ١ : Academic standard of the program

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

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

ملحق ٤ : مصفوفة البرنامج مع المعايير الأكاديمية للبرنامج.

ملحق ٥ : مصفوفة المقررات مع البرنامج Program–Courses ILOs Matrix

ملحق ٦ : توصيف المقررات

ملحق ١ : Academic standard of the program

المعايير الأكاديمية لبرنامج دبلوما طب العين وجراحاتها

١- مواصفات الخريج:

خريج برنامج دبلوما طب وجراحة العين يجب أن يكون قادرا على:

- 1-10 Applying the knowledge he acquired during ophthalmic study
- 1-11 Specifying ophthalmic problems and providing solutions
- 1-12 Mastering ophthalmic practical skills and applying recent technology in thid field
- 1-13 Communication abilities and leading a teamwork

- 1-14 Making proper decisions based on the available data
- 1-15 Efficient use of the available resources
- 1-16 Awareness of his role in community development
- 1-17 Committing ethical behavior
- 1-18 Awareness of self progress and continuous education

٢ - المعايير القياسية العامة:

2-1. - المعرفة والفهم :

2.1. Knowledge and Understanding:

By the end of the program, the graduate should be able to know and understand:

2-1-1 Basics, theories and essential knowledge in ophthalmic practice and related sciences

2-1-2 ethical and legal aspects in ophthalmic practice

2-1-3 Essentials of quality management in ophthalmic field

2-1-4 Effect of ophthalmic practice on surrounding community and environment

. 2-2 - القدرات الذهنية :

2.2. Intellectual Skills:-

By the end of the program the graduate should be able to:

2-2-1 Specify and analyze challenges in ophthalmic practice

2-2-2 Solving problems in ophthalmic field

2-2-3 Analyzing ophthalmic scientific research

2-2-4 Risk assessment in ophthalmic field

2-2-5 Making decisions based on available information

٢-٣ - مهارات مهنية وعملية :

2.3. Practical & PROFESSIONAL Skills:-

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

2-3-1 Applying practical skills in ophthalmic field

2-3-2 Writing practical reports

٢-٤ . مهارات عامة ومنتقلة :

2.4. General and transferable skills:

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

2-4-1 Active communication by its different means

2-4-2 Using information technology to develop his practice

2-4-3 Self assessment and specifying needs

2-4-4 Using different resources to gather data

2-4-5 Teamwork and time management

2-4-6 Leading ateam in ophthalmic practice

2-4-7 Continuous self learning

اعتماد مجلس القسم بتاريخ ٢٠١٣/٦/٢

ملحق 2: المعايير القياسية العامة للدراسات العليا الصادرة عن الهيئة

أولاً: برامج دبلومه الدراسات العليا

١- موصفات الخريج:

خريج برامج دبلومه الدراسات العليا فى اى تخصص يجب أن يكون قادرا على :

- ١-١ تطبيق المعارف المتخصصة التى اكتسبها فى ممارسته المهنية .
- ٢-١ تحيد المشكلات المهنية واقتراح حلولاً لها.
- ٣-١ إتقان المهارات المهنية واستخدام الوسائل التكنولوجية المناسبة فى ممارسته المهنية .
- ٤-١ التواصل وقيادة فرق العمل من خلال العمل المهني المنظومي
- ٥-١ اتخاذ القرار فى ضوء المعلوما المتاحة
- ٦-١ توظيف الموارد المتاحة بكفاءة
- ٧-١ الوعى بدوره فى تنمية المجتمع والحفاظ على البيئة
- ٨-١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة وتقبل المسائلة والمحاسبة
- ٩-١ إدراك ضرورة تنمية ذاته والانخراط فى التعليم المستمر
- ٢- المعايير القياسية العامة :

١-٢ المعرفة والفهم:

بانتهاى دراسة برامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على فهم واستيعاب كل من :

١-١-٢ النظريات والاساسيات والمعارف المتخصصة فى مجال التعلم وكذا العلوم ذات العلاقة بممارسته المهنية

٢-١-٢ المبادئ الأخلاقية والقانونية للممارسة المهنية فى مجال التخصص

٣-١-٢ مبادئ وأساسيات الجودة فى الممارسة المهنية فى مجال التخصص

٤-١-٢ تأثير لممارسة المهنية على البيئة والعمل على الحفاظ على البيئة وصيانتها

٢-٢ المهارات الذهنية :

بانتهاى دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

١-٢-٢ تحديد وتحليل المشاكل فى مجال التخصص وترتيبها وفقا لأولوياتها

٢-٢-٢ حل المشاكل المتخصصة فى مجال مهنته

٣-٢-٢ القراءة التحليلية للأبحاث والمواضيع ذات العلاقة بالتخصص

٤-٢-٢ تقييم المخاطر فى الممارسات المهنية

٥-٢-٢ اتخاذ القرارات المهنية فى ضوء المعلومات المتاحة

٣-٢ المهارات المهنية :

بانتهاى دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

١-٣-٢ تطبيق المهارات المهنية فى مجال التخصص

٢-٣-٢ كتابة التقارير المهنية

٤-٢ المهارات العامة والمنتقلة:

بانتهاى دراسة برنامج دبلومه الدراسات العليا يجب أن يكون الخريج قادرا على :

١-٤-٢ التواصل الفعال بأنواعه المختلفة

٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية

٣-٤-٢ التقييم الذاتى وتحديد احتياجاته التعليمية الشخصية

٤-٤-٢ استخدام المصادر المختلفة للحصول على المعلومات والمعارف

٥-٤-٢ العمل فى فريق وادارة الوقت

٦-٤-٢ قيادة فريق فى سياقات مهنية مألوفة

٧-٤-٢ التعلم الذاتى والمستمر

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

٣- مواصفات الخريج:	
مواصفات الخريج بالمعايير الأكاديمية للبرنامج	مواصفات الخريج بالمعايير القياسية للدراسات العليا (درجة الدبلومه)
1-1 Applying the knowledge he acquired during ophthalmic study	١-١ تطبيق المعارف المتخصصة التي اكتسبها في ممارسته المهنية .
1-2 Specifying ophthalmic problems and providing solutions	٢-١ تحديد المشكلات المهنية واقتراح حلول لها.
1-3 Mastering ophthalmic practical skills and applying recent technology in thid field	٣-١ إتقان المهارات المهنية واستخدام الوسائل التكنولوجية المناسبة في ممارسته المهنية .
1-4 Communication abilities and leading a teamwork	٤-١ التواصل وقيادة فرق العمل من خلال العمل المهني المنظومي
1-5 Making proper decisions based on the available data	٥-١ اتخاذ القرار في ضوء المعلوما المتاحة
1-6 Efficient use of the	٦-١ توظيف الموارد المتاحة بكفاءة

available resources	
1-7 Awareness of his rule in community development	٧-١ الوعي بدوره فى تنمية المجتمع والحفاظ على البيئة
1-8 Committing ethical behavior	٨-١ التصرف بما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة وتقبل المسائلة والمحاسبة
1-9 Awareness of self progress and continuous education	٩-١ إدراك ضرورة تنمية ذاته والانخراط فى التعليم المستمر
<p>٤ - المعايير القياسية العامة:</p> <p>١-٢ - المعرفة والفهم :</p> <p>2.١. Knowledge and Understanding:</p>	
<p>2-1-1 Basics, theories and essential knowledge in ophthalmic practice and related sciences</p> <p>2-1-2 ethical and legal aspects in ophthalmic practice</p>	<p>١-١-٢ النظريات والاساسيات والمعارف المتخصصة فى مجال التعلم وكذا العلوم ذات العلاقة بممارسته المهنية</p> <p>٢-١-٢ المبادئ الأخلاقية والقانونية للممارسة المهنية فى مجال التخصص</p>
2-1-3 Essentials of quality management in ophthalmic field	٣-١-٢ مبادئ وأساسيات الجودة فى الممارسة المهنية فى مجال التخصص
2-1-4 Effect of ophthalmic practice on surrounding	٤-١-٢ تأثير لممارسة المهنية على البيئة والعمل على الحفاظ على البيئة وصيانتها

<i>community and environment</i>	
٢-٢ - القدرات الذهنية :	
2.٢. Intellectual Skills:-	
<i>2-2-1 Specify and analyze challenges in ophthalmic practice</i>	١-٢-٢ تحديد وتحليل المشاكل في مجال التخصص وترتيبها وفقا لأولوياتها
<i>2-2-2 Solving problems in ophthalmic field</i>	٢-٢-٢ حل المشاكل المتخصصة في مجال مهنته
<i>2-2-3 Analyzing ophthalmic scientific research</i>	٣-٢-٢ القراءة التحليلية للأبحاث والمواضيع ذات العلاقة بالتخصص
<i>2-2-4 Risk assessment in ophthalmic field</i>	٤-٢-٢ تقييم المخاطر في الممارسات المهنية
<i>2-2-5 Making decisions based on available information</i>	٥-٢-٢ اتخاذ القرارات المهنية في ضوء المعلومات المتاحة
٣-٢ - مهارات مهنية وعملية :	
2.٣. Practical & PROFESSIONAL Skills:-	
<i>2-3-1 Applying practical skills in ophthalmic field</i>	١-٣-٢ تطبيق المهارات المهنية في مجال التخصص
<i>2-3-2 Writing practical reports</i>	٢-٣-٢ كتابة التقارير المهنية

٢-٤. مهارات عامة ومنتقلة :	
2.٤. General and transferable skills:	
2-4-1 Active communication by its different means	١-٤-٢ التواصل الفعال بأنواعه المختلفة
2-4-2 Using information technology to develop his practice	٢-٤-٢ استخدام تكنولوجيا المعلومات بما يخدم تطوير الممارسة المهنية
2-4-3 Self assessment and specifying needs	٣-٤-٢ التقييم الذاتى وتحديد احتياجاته التعليمية الشخصية
2-4-4 Using different resources to gather data	٤-٤-٢ استخدام المصادر المختلفة للحصول على المعلومات والمعارف ٥-٤-٢ العمل فى فريق وادارة الوقت
2-4-5 Teamwork and time management	٦-٤-٢ قيادة فريق فى سياقات مهنية مألوفة
2-4-7 Continuous self learning	٧-٤-٢ التعلم الذاتى والمستمر

ملحق 4: مصفوفة مضاهاة المعايير الأكاديمية للبرنامج و أهداف و نواتج تعلم البرنامج

أهداف البرنامج	المعايير الأكاديمية لبرنامج دبلوما طب وجراحة العين (مواصفات الخريج)
1.1	1-1 Applying the knowledge he acquired during ophthalmic study
1.2	1-2 Specifying ophthalmic problems and providing solutions
1.3	1-3 Mastering ophthalmic practical skills and applying recent technology in thid field
1.4	1-4 Communication abilities and leading a teamwork
1.5	1-5 Making proper decisions based on the available data
1.6	1-6 Efficient use of the available resources
1.7	1-7 Awareness of his rule in community development
1.8	1-8 Committing ethical behavior
1.9	1-9 Awareness of self progress and continuous education

واتج تعلم البرنامج											المعايير الأكاديمية للبرنامج		
المعرفة والفهم													
									2.a.4	2.a.3	2.a.2	2.a.1	2-1. - المعرفة والفهم : By the end of the program, the candidate should be able to have sound knowledge about : 2-1-1 Basics, theories and
												v	

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نواتج تعلم البرنامج						المعايير الأكاديمية للبرنامج	
Practical & PROFESSIONAL Skills							
				2.c.2	2.c.1		
					√	2-3-1 Applying practical skills in ophthalmic field	
				√		2-3-2 Writing practical reports	

نواتج تعلم البرنامج							المعايير الأكاديمية للبرنامج	
General and transferable skills								
2.d.7	2.d.6	2.d.5	2.d.4	2.d.3	2.d.2	2.d.1		
			√			√	2-4. مهارات عامة : By the end of the program, the candidate should be able to practice:	
					√		2-4-1 Active communication by its different means	
						√	2-4-2 Using information technology to develop his practice	
				√			2-4-3 Self assessment and specifying needs	
			√				2-4-4 Using different resources to gather data	
		√					2-4-5 Teamwork and time management	
	√						2-4-6 Leading a team in ophthalmic practice	
√							2-4-7 Continuous self learning	

ملحق (5) مصفوفة المعارف والمهارات للبرنامج الدراسي

Knowledge & Understanding المعارف								ILOs		
					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 •

Intellectual Skills مهارات ذهنية								ILOs			
					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 •

Practical & PROFESSIONAL Skills مهارات عملية و مهنية								ILOs		
							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.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 :

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
- **Diploma 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:** 24 weeks of teaching
- **Teaching hours:** 3 hours/week = 72 total teaching hours
 - **Theoretical: 1.5 hours**
 - **Practical: 1.5 hours**

B) Professional Information:

1- Overall Aim of the Course:

demonstrate 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.

understanding of the embryology, maturation and normal ageing changes of the human eye.

to 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. Practical and PROFESSIONAL Skills

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

2.2.1-interpret function of optical system

2.2.2-interpret the relation between the eye and surrounding structures like cranium ,sinuses and nasal cavities.

2.2.3-Master the basic and modern anatomical skills to help in clinical and surgical Skills in future practice.

2.3. Intellectual Skills:

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

2.3.1 integrate clinical findings in ophthalmic diagnosis .

2.3.2 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 .

2.4. Communication skills & transferable Skills:

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

2.4.1 Work effectively both individually and in team work .

2.4.2 Make effective use of information technology eg, Internet

2.4.3 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	2.5	2.5	5	6.94
2- extra-ocular muscle, and periorbita	2.5	2.5	5	6.94
3- Eye lid(blood and nerve supply)	2.5	2.5	5	6.94
4- Sclera and episclera	1.5	1.5	3	4.17
5- Anatomy,histology and embryology of the conjunctiva	1.5	1.5	3	4.17
6- Limbus, anterior chamber, angle and posterior chamber	1.5	1.5	3	4.17
7- Anatomy and embryology of Uvea(blood and nerve supply)	3	3	6	8.33
8- Anatomy ,histology and embryology of cornea	3	3	6	8.33

9- Anatomy,histology and embryology of lens	3	3	6	8.33
10- Anatomy ,histology and embryology of retina and vitreous	3.5	3.5	7	9.72
11- Blood supply of the eye and its adnexa	2.5	2.5	5	6.94
12- Anatomy,histology and embryology of the lacrimal system	2	2	4	5.56
13- Visual pathway, optic nerve, optic chiasm and relations, optic tract, striate, cortex	3	3	6	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}	4	4	8	11.11
Total	36	36	72	100

4- Teaching and learning methods:

METHODS USED:

1. Modified Lectures
2. Small group discussions
3. Problem solving.
4. Self learning

TEACHING PLAN:

Lectures: Division of students into 4 groups

1 time/week, Time from 9.0am to 10.30 am

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1</u> time/week; 1.5 teaching hour	36 hours	50%
Tutorial	1 time/week; 1.5 teaching hour	36 hours	50%
Total		72 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 b- Oral	60 40	60% 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: 2013-2014



Benha University
Faculty of Medicine
Department of Ophthalmology.

Course Specification

Course title: : Physiology_for postgraduates

(Code) OPTH 603

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Diploma 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:** 24 weeks of teaching
- **Teaching hours:** 1.5 hours/week = 36 total teaching hours
 - **Theoretical: 3/4 hours Practical: 3/4 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 course, students should be able to:

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

2.2. Practical and PROFESSIONAL Skills

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

- 2.2.1 apply the normal physiology of ocular tissues as an organ concerned with vision.
- 2.2.2 Assess methods and tools existing in the area of ophthalmology.

2.3. Intellectual Skills:

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

- 2.3.4 interpret the physiological function of the eye with changes which happen in diseases.
- 2.3.5 relate the ocular circulation to the general circulation of the body.
- 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:

- 2.4.4 Work effectively both individually and in team work .
- 2.4.5 Make effective use of information technology eg, Internet
- 2.4.6 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	2	3/4	2 3/4	
protective mechanisms of the eye	1	3/4	1 3/4	
accommodation of the eye	1	3/4	1 3/4	
Normal & abnormal refraction of the Eye	1	3/4	1 3/4	
pupillary reflexes	1	1 1/2	2 1/2	
photoreceptors & mechanism of its excitation	2	3/4	2 3/4	
light & dark adaptation	2	3/4	2 3/4	
color vision	1	1 1/2	2 1/2	
visual pathway & field of vision	1	1 1/2	2 1/2	
Binocular muscular coordination	1	1 1/2	2 1/2	
visual acuity & factors affecting it	1	3	4	
binocular vision and its advantages & requirements	2	1 1/2	3 1/2	
eye movement & its higher control	2	3	5	

Total	18	18	36	
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4- Teaching and learning methods:

METHODS USED:

5.	Modified Lectures
6.	Small group discussions
7.	Problem solving.
8.	Self learning

TEACHING PLAN:

Lectures: Division of students into 4 group

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1</u> times/week; 3/4 hour	18	50%
Tutorial	<u>1</u> times/week; 3/4 hour	18	50%
Total		36	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: Microbiology and Pathology_for postgraduates

(Code) OPTH 608

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Diploma degree of Ophthalmology:** Level: 2nd 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:** 48 weeks of teaching
- **Teaching hours:** 6 hours/week = 288 teaching hours .
 - **Theoretical: 3 hours**
 - **Practical: 3 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:

By the end of the course student should be able to

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. Practical and PROFESSIONAL Skills

By the end of the course student should be able to

:

- 2.2.1observe the gross lesion of different structures of the eye ball and its adnexa.
- 2.2.2-document the clinical picture with the pathological findings of specimen to reach the proper diagnosis.
- 2.2.3-differentiate the pathological lesions into inflammatory ,degenerative or malignant

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

2.3. Intellectual Skills:

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

2.3.7 integrate clinical findings in ophthalmic diagnosis .

2.3.8 formulate proper plans of treatment.

2.3.9 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 student should be able to

2.4.7 Work effectively both individually and in team work .

2.4.8 Make effective use of information technology eg, Internet

2.4.9 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 & diphtheroids
- 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	32	16	16	11.11%
Ocular Virology	15	8	7	4.44%
Ocular Mycology	15	5	5	4.44%
Ocular Parasites	10	5	5	4.44%
total	72	36	36	24.44%
II. Ocular Pathology				

General Pathology	46	23	23	17.78%
1. Introduction, Cell injury, Accumulations & depositions	11	6	5	4.44%
2. Inflammation & Repair	12	6	6	4.44%
3. Growth Disturbances & Neoplasia	12	6	6	4.44%
4. Ocular Immunology	11	6	5	4.44%
Special Pathology	170	85	85	57.78%
1. Eye lid & Conjunctiva	26	13	13	8.89%
2. Lacrimal system & Orbit	12	6	6	4.44%
3. Cornea and sclera	13	6	6	4.44%
4. Uvea	12	6	6	4.44%
5. Intraocular tumors	28	14	14	8.89%
6. Cataract	12	6	6	4.44%
7. Glaucoma	12	6	6	4.44%
8. Retina and vitreous	12	6	6	4.44%
9. Optic nerve	14	7	7	4.44%
10. Wound healing and Ocular trauma	12	6	6	4.44%
11. Oph. genetic dis. & Phakomatosis	12	6	6	4.44%
Total	288	144	144	100%

4- Teaching and learning methods:

METHODS USED:

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

TEACHING PLAN:

Lectures: Division of students into 4 groups

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week;each 1.5 hrs	144	50%
Practical	<u>2</u> times/week;each 1.5 hrs	144	50%
Total		288	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) Examinations 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: Optics of the eye

(Code) OPTH 602

Academic Year (201۳-201۴)

- **Department offering the course:** Ophthalmology department
- **Diploma degree program:** Level: 1st part
- **Date of specification approval:**
 - Department council, date: ۱/۹/201۳
 - Faculty council no ۳۵۶ , date: ۱۵/۹/201۳

A) Basic Information:

- **Allocated marks:** 100 marks
- **Course duration:** 24 weeks of teaching
- **Teaching hours:** 3 hours/week = 72 total teaching hours
 - **Theoretical: 1.5 hours**
 - **Practical: 1.5 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 student 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. Practical and PROFESSIONAL Skills

By the end of the course student should be able to

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

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

2.3. Intellectual Skills:

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

2.3.10 integrate clinical findings in ophthalmic diagnosis .

2.3.11 formulate proper plans of treatment.

2.3.12 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 student should be able to

2.4.10 Work effectively both individually and in team work .

2.4.11 Make effective use of information technology eg, Internet

2.4.12 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
Properties of light	1.5	0.5	1.5	2.08%
Reflection of light	1.5	0.5	1.5	2.08%
Refraction of light	1.5	0.5	1.5	2.08%
Prisms	1.5	1	2.5	3.13%
Refraction by lenses	1.5	1	2.5	3.13%
Refraction of the eye	1.5	1.5	3	4.17%
Aberrations	1.5	1.5	3	4.17%
Ametropia	2	2	4	5.21%
Accommodation	1.5	1.5	3	4.17%
Binocular muscular coordination	1.5	1.5	3	4.17%
Retinoscopy	1.5	1.5	3	4.17%
Ophthalmoscopy	1.5	1.5	3	4.17%
Verification of refraction	2.5	2	4.5	6.25%
Spectacles	2.5	2	4.5	6.25%
Contact lenses	2.5	2	4.5	6.25%
Intraocular lenses	2	2	4	6.19%
Low vision aids	1.5	1.5	3	4.17%
Ophthalmoptic instruments: Microscopy , operating microscope , Slit Lamp ,	12	8	20	27.08%

Fundus Camera Refractometers , Keratometers , Orthoptic, and laser				
Total	36	36	72	100%

4- Teaching and learning methods:

METHODS USED:

15. Lectures
16. Small group discussions
17. Workshops
18. Practical classes: Data show slides: optics of the eye.
19. Seminars
20. Tutorial

TEACHING PLAN:

Lectures: Division of students into 2 groups

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1 time</u> / week;each 1.5 hr	36	50%
Tutorial	<u>1 time</u> / week;each 1.5 hr	36	50%
Total		72	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: 201٣-201٤



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

(Code) MED 503

Academic Year (2014-2015)

- **Department offering the course:** General Medicine department
- **Diploma degree program:** Level: 1st part
- **Date of specification approval:**
- **Department council,**date 1/9/2014
 - **Faculty council no** 306 , **date** 10/9/2014

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 course student should be able to

- 2.1.1 explain knowledge about medical disorders affecting eye
- 2.1.2 discuss the diabetic changes retina, hypertensive emergencies and cardio-pulmonary resuscitation
- 2.1.3 explain the pathophysiology autoimmune diseases affecting the eye

2.2. Practical and PROFESSIONAL Skills

By the end of the course student should be able to

2.2.1 employ the normal homeostasis of the body.

2.2.2 control medical emergencies

2.2.3 Assess methods and tools existing in the area of ophthalmology.

2.3. Intellectual Skills:

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

2.3.13 interpret the pathophysiological functions of the eyes and its changes due to systemic diseases

2.3.14 know the ocular circulation and its relation to the general circulation of the body.

2.3.15 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 program the graduate will be able to:

2.4.13 Work effectively both individually and in team work .

2.4.14 Make effective use of information technology eg, Internet

2.4.15 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
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:

- 21.Modified Lectures
- 22.Small group discussions
- 23.Problem solving.

TEACHING PLAN:

Lectures: Division of students into 4 group

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1</u> times/week; 3/4 hour	11.25	50%
Tutorial	<u>1</u> times/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: 201٣-201٤



**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
- **Diploma 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

	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:

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 student 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. Practical and PROFESSIONAL Skills

By the end of the course student should be able to

2.1.1 manage the acute emergencies and life saving maneuvers

2.1.2 Practice manual minor surgical procedures related to the eye and adnexae

2.1.3 Practice proper usage of fluids and blood transfusion.

2.3. Intellectual Skills:

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

2.3.16 interpret the pathophysiological functions of the eyes and its changes due to surgical diseases

2.3.17 relate the head and neck emergencies to the general circulation of the body.

2.3.18 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 student should be able to

2.4.16 Work effectively both individually and in team work .

2.4.17 Make effective use of information technology eg, Internet

2.4.18 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
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 abscess	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:

24. Modified Lectures

25. Small group discussions

26. Problem solving.

TEACHING PLAN:

Lectures: Division of students into 4 group

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>1</u> times/week; 3/4 hour	11.25	50%
Tutorial	<u>1</u> times/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) Examinations 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: Medical Ophthalmology for postgraduates

(Code) OPTH 606

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Diploma degree program:** Level: 2nd part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no ٣٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 48 weeks of teaching
- **Teaching hours:** 9 hours/week = 432 total teaching hours
 - **Theoretical: 3 hours**
 - **Practical: 6 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- 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 student 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 explain the principles and fundamentals of prevention control and avoiding further complications
- 2.1.describe the principles , basics and ethics of scientific research .

2.2. Practical and PROFESSIONAL Skills

By the end of the course student 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 Interpret 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:

2.3.19 integrate clinical findings in ophthalmic diagnosis .

2.3.20 To formulate proper plans of treatment.

2.3.21 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 student should be able to:

2.4.19 Work effectively both individually and in team work .

2.4.20 Make effective use of information technology eg, Internet

2.4.21 Demonsrate self-direction & some originality in taking and solving problem

3- Course contents:

Subject	Lectur es (hrs)	Tutorial / Small group discussi on (hrs)	Practic al (hrs)	Tot al (hrs)	% of Tot al
Introduction: Ocular Symptoms and Signs	2	2	3	7	
Diseases of the eye lids: blepharitis, allergy, lid retraction, madarosis, blepharospasm, infections	3	4	6	13	
Disease of the Cornea: Keratitis (Bacterial, Viral, Mycotic), pigmentation, precipitates, peripheral corneal disorders,	5	9	9	23	

degenerations, dystrophies, ectasia					
Diseases of the conjunctiva: conjunctivitis (Bacterial, Viral, Chlamydial, Allergic) Mucocutaneous disorders, dry eye	12	7	12	31	
Diseases of the lacrimal apparatus: dacryoadenitis, dacryocystitis, canaliculitis	17	12	12	41	
Glaucomas: ocular hypertension, primary open angle glaucoma, normotensive glaucoma, primary angle closure glaucoma, secondary open angle glaucoma, secondary angle closure glaucoma, infantile & juvenile glaucoma	25	25	15	65	
Diseases of Sclera : Scleritis- Episcleritis	6	8	9	23	
Disease of Uvea: Uveitis (Infective, Non-infective, Chronic)	12	15	15	42	
Diseases of Retina : Dystrophies (Receptors, Retinal pigment epithelium & Choroidal (Degenerations Vascular: Retinopathies (Diabetic, Hypertensive, Renal, Toxaemia, Arteriosclerotic), retinal artery occlusion & retinal vein occlusion	16	12	8	36	
Diseases of optic nerve: Neuropathy, Neuritis, Papilledema, congenital.	10	12	9	31	
Strabismus: amblyopia, clinical evaluation, horizontal & vertical patterns, alphabet patterns	10	6	12	28	
Disease of the orbit: thyroid eye diseases, infections, inflammations	5	9	12	26	
Diseases of Macula: age related macular degeneration, central serous chorio retinopathy, Cystoid macular oedema, .Maculopathies	3	12	9	24	
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, Leprosy & Sarcoidosis)- Phacomatosis- Muscular diseases.	8	4	4	16	
Neuro-ophthalmology (pupillary	6	3	5	14	

anomalies, nystagmus, ophthalmoplegia, migraine, brain stem syndromes, optic atrophy & chiasmal lesions)					
Ocular therapeutic	4	4	4	12	
Total	144	144	144	432	

4- Teaching and learning methods:

METHODS USED:

27. Modified Lectures
28. Small group discussions
29. Problem solving.
30. Self learning
31. Practical classes
32. Data show slides

TEACHING PLAN:

Lectures: Division of students into 6 groups

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

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

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week	144	33.33%
Practical	<u>1</u> time / week	144	33.33%
Tutorial	<u>1</u> time / week	144	33.33%
Total		432	432

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 bjournal.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 for postgraduates

(Code) OPTH 607

Academic Year (201٣-201٤)

- **Department offering the course:** Ophthalmology department
- **Diploma degree program:** Level: 2nd part
- **Date of specification approval:**
 - Department council, date ١/٩/201٣
 - Faculty council no ٣٥٦ , date ١٥/٩/201٣

A) Basic Information:

- **Allocated marks:** 300 marks
- **Course duration:** 48 weeks of teaching
- **Teaching hours:** 9 hours/week = 432 total teaching hours
 - **Theoretical: 3 hours**
 - **Practical: 6 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 student should be able to

- 2.1.1 list steps 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 state different surgical principles to correct different surgical problems.
- 2.1.8 discuss the principles , basics and ethics of scientific research.

2.2. Practical and PROFESSIONAL Skills

By the end of the course student 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 practice different techniques in removal of pterygium and chalazion, cataract and glaucoma surgery and retinal detachment correction.
- 2.2.9 deal with traumatic injuries of the eye and orbit.
- 2.2.10 deal with chemical injuries of the eye and adnexa.

2.3. Intellectual Skills:

By the end of the course student should be able to

2.3.22 integrate clinical findings in ophthalmic diagnosis .

2.3.23 formulate proper plans of treatment.

2.3.24 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 student should be able to

2.4.22 Work effectively both individually and in team work .

2.4.23 Make effective use of information technology eg, Internet

2.4.24 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)	6	6	6	18	
Sterilization and Disinfection(methods used & its principle)	2	6	6	14	
Ocular anesthesia (peribulbar,retrobulbar,etc)	2	12	9	23	
surgical diseases of eye Lids(Ectropion,entropion,etc)	18	9	12	39	
Surgical diseases of the	20	9	15	44	

Cornea(perforated corneal ulcer,keratoconus,keratoplasty,corneal& anterior segment trauma&conj.flap surgery)					
Surgical diseases of the Conjunctiva(symblepharon,pterygium)	18	15	12	45	
Surgical disease of the lacrimal system (dacryocystitis,lacrimal fistula)	6	12	9	27	
Surgical diseases of the Lens(cataract,aphakia,sub-laxation,IOLs,pediatric cataract surgery,postop.care and phaco complications)	17	15	15	47	
Surgical management of Glaucoma (Penetrating,non penetrating,aqueous tube shunts,coincident cataract&glaucoma surgery,surgical ttt for developmental glaucoma,laser trabeculoplasty&PI&cyclophotocoagulation)	16	12	6	34	
Surgical diseases of the Retina & vitreous : Principals of VR surgery. Application of intravitreal drugs. Endophthalmitis diagnosis& ttt. AMD& macular hole surgery. PP lensectomy for retained lens material.	15	12	9	36	
Refractive surgery : LASIK pt evaluation & selection. Laser technology(Excimer&Femto). Surface ablation :PRK,LASEK,&Epi-LASIK LASIK for myopia,hyperopia&astigmatism. Phakic IOL. Refractive lens exchange. Biomechanics in refractive surgery.	9	6	12	27	
Strabismus (Esotropia,exotropia,clinical evaluation,management,special	7	9	12	28	

syndromes)					
Surgical diseases of the orbit: Surgical approaches to the orbit. Surgical rehabilitation of Graves'Orbetopathy. Enucleation&evisceration. Manegment of post-enucleation socket syndrome.	4	12	9	25	
Surgical management of ocular trauma(rupture globe,lid trauma,IOFB)	4	9	12	25	
Total	144	144	144	432	

4- Teaching and learning methods:

METHODS USED:

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35. Problem solving.
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TEACHING PLAN:

Lectures: Division of students into 4 groups

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

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	<u>2</u> times/week; 1½ hours each	144	33.33%
Practical	<u>one</u> time/week; 3 hours	144	33.33%
Tutorial	<u>One</u> time/week; 3 hours	144	33.33%
Total		432	100%

5- Students Assessment methods:

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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:		
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- **George L. Spaeth Ophthalmic surgery: principles and practice 3r^d 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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Date: 201٣-201٤