كلية الطب

Faculty of Medicine

MINIA UNIVERSITY

Master (MSc) Program & Courses' Specifications of Ophthalmology

نموذج رقم (١٣)

Program Specifications for MSc of Ophthalmology

(2022/2023)

University: MINIA

Faculty(s): MEDICINE

Department: **Ophthalmology**

A- Basic Information:

1- **Program title:** Master Degree in Ophthalmology (Msc)

2- **Program type:** **Single** ☑ Double ☐ Multiple ☐

3- **Department responsible for offering the degree:** Ophthalmology Department.

4- **Program duration: 2 years**

5- **Coordinator: Prof. Dr Mahmoud Genaidy**

6- **External Evaluator: Prod DR Mohamed Saad Abdel-Rahman**

7- **Program Management team: Dr. Mohamed Ismaeil Abdallah, Dr. Doaa Gamal Elfadaly, Dr. Ahmed Maher Khalafallah**

8- **Code: OO200**

B- Professional Information:

1- Program aims:

Graduate of Master Degree in Ophthalmology the candidate should be able to:

1.1. Allow the postgraduates to practice (efficiently) in the field of Ophthalmology both medically and surgically.
1.2. Acquire related risk in professional practices in field of Ophthalmology.
1.3. Gain recent research topics related to Ophthalmology.
1.4. How to do research in Ophthalmology (research methodology).
1.5. Enable the postgraduates to use research methodology and statistical principles in interpretation of data in their scientific research.

2- Intended learning outcomes (ILOs)

2.1. (a) Knowledge and understanding:

By the end of the study of master program in Ophthalmology the candidate should be able to:

a1. Recognize clinical diagnosis of diseases affecting the eye and the adenexa.
a2. Recognize the optics of the eye and apply optical principles in clinical practice.
a3. Recognize the essential modalities of basic clinical ophthalmological examination (visual acuity testing, intra-ocular pressure measurement, slit lamp examination, indirect and direct ophthalmoscopy, retinoscopy and gonioscopy).
a4. Identify investigative modalities in Ophthalmology (Optical coherence tomography, fluorescein angiography, visual field examination, electrophysiological testing, B- scan ultrasonography, pentacam).
a5. Identify orbital C.T and MRI.
a6. Identify surgical skills for basic ophthalmic procedures including (cataract and glaucoma surgeries, strabismus surgery, minor ophthalmic procedures).
a7. Identify post operative complications, specially post operative endophthalmitis and provide first aid treatment in such conditions.
a8. Identify cases of orbital cellulitis and other ophthalmic emergencies including ophthalmic trauma, vascular occlusion and angle closure glaucoma crisis.
a9. List neurologic and ophthalmology related disorders.
a10. List ocular manifestation of systemic diseases.
a11. State current research methodology, collection and interpretation of data to be able to carry out research projects on clinical aspects, referencing and skill in writing scientific papers.
a12. Define and commit to ethical and scientific basics of medical research.

2.2. (b)Intellectual skills

By the end of master program in Ophthalmology the candidate should be able to:

b1. Relate medical dilemmas and complexities and how to solve them.

b2. Conduct scientific discussion.

b3. Select from different choices based on multiple determining factors as social, scientific, economic etc...

b4. Prioritize and tailor the different guidelines to individual situations, be aware of international guidelines like American Academy Ophthalmology and Royal College Guidelines.

b5. Conduct ideal management of medical and surgical emergency states.

b6. Differentiate different emergency conditions in ophthalmology and manage them

b7. Relate the surgical skills and performance to the state of the art.

b8. Analyze and interpret any abnormalities in both eyes and other systems.

b9. Analyze different research papers and choose best technique, microscopy and statistical & computer programs to interpret results.

b10. Compute research studies (thesis).

b11. Apply safety measures during professional practicing in different ophthalmic surgery.

b12. Design a plan for improving the departmental performance in the field of teaching and research.

b13. Design the principles and fundamentals of quality assurance of professional practice in the field of Ophthalmology.

b14. Apply safety measures during professional practicing in different ophthalmic sub-specialties.

2.3. Skills:

2.3.1. (c)Professional and practical skills

By the end of the study of master program in Ophthalmology the candidate should be able to:

c1. Take a focused medical history with proper analysis and conclusions.

c2. Examine properly and systematically the eye and the adenexa with an exact follow of the standard rules and interpret signs individually.

c3. Integrate data from the history and the examination done.

c4. Decide the proper investigations to be done for a given medical problem.

c5. Diagnose and differential diagnosis of different cases.

c6. Prescribe treatment for a given medical problem within a multidisciplinary management plan if needed.

c7. Decide patients needing hospitalization, and those needing surgical intervention.

c8. Analyze the collected data using different types of statistical programs as SPSS program.

2.3.2. (d)General and transferable skills

By the end of the study of master program in Ophthalmology the candidate should be able to:

d1. Develop efficient communication skills using all sorts.
d2. Apply information technology to improve professional practice.
d3. Interpret data of skills of self-evaluation and identification of personal learning needs.
d4. Generate data gathering.
d5. Use capability to put roles and indicators for performance evaluation and appraisal.
d6. Adopt skills of effective time management.
d7. Adopt Skills of self and continuous learning.
d8. Prepare and integrate scientific activities as seminars, journal clubs, scientific meetings or conferences. Improve his practice through constant self-evaluation and life-long learning.

2- Program Academic Reference Standards

- Faculty of Medicine Minia university adopted the general national academic reference standards provided by the national authority for quality assurance and accreditation of education (NAQAAE) for all postgraduate programs. (Faculty Council decree No.6854, in its cession No.177 Dated: 18\5\2009). **{Annex 1}.**

- Faculty of Medicine Minia university has developed the academic standards (ARS) for Master (MSc) program and approved in faculty Council decree No.7528, in its session No.191, dated: 15\3\2013), last updated 20-2-2022 **{Annex 2}.**

- Then Ophthalmology department has adopted these standards and developed Master (MSc) program in Ophthalmology and the date of program specifications 1st approval by department council: 13/5/2013.

- Recent update in the department service meeting on 6th March 2023.

4. Program External References

- Minia faculty of medicine adopted the standards provided by "Accreditation council for graduate Medical Education" (http: acgme.org). (Date and NO. of faculty council approval).

5. Program Structure and Contents:

5. A. Program duration: At least 2 years.

5. B. Program structure:

- No of hours/week:
  - Lecture: 12…hrs/w
  - Clinical:12 ….hrs/w

- Surgical training 4h /w
- Total hours/week: 28….hrs/w

- Basic sciences (compulsory) courses: No;…6 Percentage %:40…
- Specific courses related to the specialty: No:2 Percentage %:60…
- Training programs and workshops, field visits, seminars & other scientific activities: Distributed along the whole program.

5. C. Levels of program in credit hours system: Not applicable

5. D. Program courses:

Number of courses: 9….

N.B. {Courses' specifications are present in Annex 4} & {Correlations of Program ILOs with courses are present in Annex 5}.

Course Title		Total No. of Hours	No. of hours /week		
			Lect.	Practical	tutorial
FIRST PART (Level of course):					
1. Physiology	**OO200**	22	2		
2. Anatomy	**OO200**	75	1	2	
3. Optics	**OO200**	30	2	1	
4. General medicine	**OO200**	20	2	2	
5. General Surgery	**OO200**	20	3	3	

6. Medical ethics	**OO200**	45	2	1	
Training programs and workshops, field visits, seminars& other scientific activities		Continuous			
SECOND PART (Level of course):	Code No. of course				
7. Ophthalmic medicine		30	3	8	
8. Ophthalmic surgery		30	3	8	
9. Pathology		30	2	2	

6- Program admission requirements:

1. General requirements:

A. Candidates should have either:

1. MBBCh degree from any Egyptian faculty of medicine or

2. Equivalent degree from medical schools abroad approved by the ministry of higher education

B. Candidate should complete the house office training year.

C. Follows postgraduate regulatory rules of Minya faculty of medicine.

2. Specific requirements:

A. Candidates graduated from Egyptian universities should "Good Rank" in their final year/cumulative years examination and grade "Good Rank "in Ophthalmology course too.

B. Candidate should know how to speak and write English well.

C. Candidate should have computer skills.

7- Regulations for progression and program completion:

Duration of program is 3years, starting from registration till the second part exam; divided to:

First Part: (≥6 months):

- All courses as specified in the internal program by law
- At least six months after registration should pass before the student can ask for examination in the 1st part
- Two sets of exams: 1st in April — 2nd in October.
- For the student to pass the first part exam, a score of at least 60% in each curriculum is needed (with at least 40% in the written exam).
- Those who fail in one curriculum need to re-exam it only.

Thesis/essay:

- Start from registration and should be completed, and accepted at least after passing 6 months from protocol registration till one month before allowing to enter 2nd part final exam.
- Accepting the thesis occurs after publishing one thesis-based paper in local or international journal and this is enough to pass this part.

Second Part: (≥18 months):

i. Program related specialized Courses.
ii. Actual work for 18 months as a resident /trainee in the department of Ophthalmology.
iii. The student should pass the 1st part before asking for examination in the 2nd part.
iv. Two sets of exams: 1st in April— 2nd in October.
v. For the student to pass the second part exam, a score of at least 60% in each curriculum is needed (with at least 40% in the written exam).
vi. Fulfillment of the requirements in each course as described in the template and registered in

the **log book** is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; as following:

Methods of teaching

a. Case based discussions at least 10 in each sub-specialty
b. Surgical cases with minimum 2 cases per each sub-specialty
c. Training courses
d. Grand rounds at least once per week
e. Didactic lectures and Case presentation
f. Seminars at least once per week
g. Thesis discussion
h. Conference attendance
i. Journal club
j. Other scientific activities requested by the department

8-Methods of student assessment:

Method of assessment	**The assessed ILOs**
1. Research (Thesis)	**a.** Knowledge & understanding (A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12) **b.** Intellectual skills (B1, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12,B11,B12) **c.** Professional & practical skills (C1, C2, C3, C4, C5, C6, C7, C8) **d.** General & transferable skills (D1, D2, D3, D4, D5, D6, D7, D8)
2. Paper based exams: • Short essay • M.C.Q • Problem solving	**a.** Knowledge & understanding (A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12) **b.** Intellectual skills (b1, b2, b3, b4, b6, b7, b8, b9)
3. Practical/Clinical	**a.** Knowledge & understanding (a1, a2, a3, a6, a8, a9)

Exams (OSCE) and CIVA (clinical imaging and video assessment)	**b.** Intellectual skills (b1, b2, b3, b6, b7) **c.** Professional & practical skills (c1, c2, c6, c7)
4. Seminars, presentations, assignments	**d.** Knowledge & understanding (a1, a2, a3, a4, a5, a6, a7, a8, a9) **e.** Intellectual skills (b1, b2, b3, b4, b6, b7, b8, b9) **f.** Professional & practical skills (c1, c2, c6, c7) **a.** General & transferable skills (D1, D2, D3, D4)
5. Oral Exams	**a.** knowledge & understanding (a1, a2, a3, a4) **b.** Intellectual skills (b1, b2, b3, b6, b7) **c.** General & transferable skills (C1, C2, C3, C4)

2. **Methods of Program Evaluation:**

Evaluator (By whom)	**Method/tool**	**Sample**
1. Senior students (Students of final years)	Questionnaires	20
2. Graduates (Alumni)	Questionnaires	20
3. Stakeholders	Meeting Questionnaires	20
4. External & Internal evaluators and external examiners	Reports	1
5. Quality Assurance Unit	Reports Questionnaires Site visits	1

Weighing of assessment:

It is mandatory to pass all the papers of written exams separately

Course	**Written**	**Oral**	**Practical**	**Total**
Anatomy	**24**	**36**		**60**
Physiology	**24**	**36**		**60**

Optics	**24**	**36**		**60**
General Surgery	**24**	**18**	**18**	**60**
General Medicine	**24**	**18**	**18**	**60**
Medical Ethics	**16**	**24**		**40**
Ophthalmic medicine	**100**	**60**	**100**	**260**
Ophthalmic surgery	**100**	**50**	**100**	**250**
Ophthalmic Pathology	**80**	**55**	**55**	**190**

- **Program Coordinators:**
  Dr Ahmed Mohamed Sabrey
  Dr Mohamed Farouk Sayed Othman
  Dr Sahar Torkey Abdelrazik Abdelaziz
  Dr Raafat Mohyeldeen Abdelrahman Abdallah
  Dr Ahmed Shawkat Mohamed Abdelhalim
  Dr Heba Radi AttaAllah Atta
  Dr Hosney Ahmed Zein Abdelalim
  Dr Mohamed Abdelhamid

- **Head of Department**:
- **Prof Dr Ahmed Mohamed Kamal Elshafie**

Date of program specifications 1st approval by <u>department council</u>: 6 /2 /2023 .

Date of <u>last update</u> & approval by <u>department council</u>: 6/3 202

Annex (1): Comparison between National Academic Quality Assurance & Accreditation (NAQAAE) General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

NAQAAE برامج الماجستير	Faculty Master (MSC) Program
١. مواصفات الخريج: خريج برنامج الماجستير في أي تخصص يجب أن يكون قادرا على:	**1. Graduate Attributes:** Graduate of master (MSC) program should be able to:
1.1. إجادة تطبيق أساسيات ومنهجيات البحث العلمي واستخدام أدواته المختلفة.	1.1. understanding and applying of basics of research method and research tools
2.1. تطبيق المنهج التحليلي واستخدامه في مجال التخصص	2.1. Critically analyze, evaluate, and effectively communicate findings, theories, and methods
3.1. تطبيق المعارف المتخصصة و دمجها مع المعارف ذات العلاقة في ممارسته المهنية.	3.1. Apply integrated professional and general knowledge in his scholarly field and at the interface between different fields.
4.1. إظهار وعيا بالمشاكل الجارية والرؤى الحديثة في مجال التخصص.	4.1. Demonstrate awareness of community health needs related to the field of specialization by understanding the beneficial interaction with the society to improve quality of life
5.1. تحديد المشكلات المهنية وإيجاد حلولا لها.	5.1. Demonstrating proficiency, required to solve current complex problems in his scholarly field.
6.1. إتقان نطاق مناسب من المهارات المهنية المتخصصة واستخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية.	6.1. Master a variety of technical skills in his scholarly field and expert relevant equipment, technology, and software.
7.1. لتواصل بفاعلية والقدرة على قيادة فرق العمل.	7.1. Gain leadership skills and be able to communicate efficiently with colleagues and get the best results.
8.1. اتخاذ القرار في سياقات مهنية مختلفة.	8.1. Take professional situational decisions and logically support them.

9.1. توظيف الموارد المتاحة بما يحقق أعلي استفادة و الحفاظ عليها	9.1.Optimal use of available resources to achieve research or best patient health care and ensure its maintenance.
10.1. إظهار الوعي بدوره في تنمية المجتمع والحفاظ على البيئة في ضوء المتغيرات.	10.1. Demonstrate awareness of its role in community health development and
11.1. التصرف بما يعكس الالتزام بالنزاهة والمصداقية والالتزام بقواعد المهنة.	11.1. Exhibit ethical behavior that reflect commitment to the code of practice
12.1. تنمية ذاته أكاديميا ومهنيا و قادرا علي التعلم المستمر.	12.1. demonstrate the ability to sustain a lifelong personal and professional growth.
٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**
٢,١. المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** Upon completion of **the Master Program in**……., the graduate should have sufficient knowledge and understanding of:
٢,١,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها علي البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization
٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.

2.2.المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**2.2. Intellectual Skills:** Upon completion of the master program of……, the graduate should be able to:
2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving
2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems
2.2.3 الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.
2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis
2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.
2.2.6. التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty
2.2.7. اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.
3.2.المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**3.2. Professional Skills:** Upon completion of the master program of……, the graduate must be able to:
3.2.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports
٢,٣,٣تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research
4.2.المهارات العامة والمنتقلة :	4.2. **General and transferable skills**

بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	Upon completion of the master program of……, the graduate should be able to:
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.
4.2.3. لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs
4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).
4.3.5. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others
4.2.6. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently
٤,٢,٨.التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.

ANNEX II: ARS VS. MSc PROGRAM of Ophthalmology

٢.المعايير القياسية العامة: **NAQAAE General Academic Reference Standards "GARS" for Master Programs**	**2. Faculty Academic Reference Standards (ARS) for Master Program**	**MSc Program of Ophthalmology**
٢,١. المعرفة والفهم: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا علي الفهم والدراية بكل من:	**2.1. Knowledge & Understanding:** Upon completion of **the Master Program in**……., the graduate should have sufficient knowledge and understanding of:	**2.1. Knowledge and Understanding** Upon completion of the master Program (MSc) in Ophthalmology the graduate should be able to:
٢,١,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة	2.1.1. Understand the scientific basis and modern knowledge in the field of specialization and related medical sciences	A1. Recognize clinical diagnosis of diseases affecting the eye and the adenexa.
٢,١,٢. التأثير المتبادل بين الممارسة المهنية وانعكاسها على البيئة	2.1.2. The mutual influence of professional practice on work environment, working conditions, and job characteristics.	**a1.** Recognize the optics of the eye and apply optical principles in clinical practice. **a2.** Recognize the essential modalities of basic clinical ophthalmological examination (visual acuity testing, intra-ocular pressure measurement, slit lamp examination, indirect and direct ophthalmoscopy, retinoscopy and gonioscopy).
٢,١,٣. التطورات العلمية في مجال التخصص	2.1.3. Scientific developments in the field of specialization	**a1.** Recognize the essential modalities of basic clinical ophthalmological examination (visual acuity testing, intra-ocular pressure measurement, slit lamp examination, indirect and direct ophthalmoscopy, retinoscopy and gonioscopy). **a2.** Identify investigative modalities in Ophthalmology (Optical coherence tomography,

		fluorescein angiography, visual field examination, electrophysiological testing, B-scan ultrasonography, pentacam). a.8 Identify cases of orbital cellulitis and other ophthalmic emergencies including ophthalmic trauma, vascular occlusion and angle closure glaucoma crisis. a.9.List neurologic and ophthalmology related disorders. a.10 List ocular manifestation of systemic diseases.
٢,١,٤. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص	2.1.4. Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	a.5. Identify orbital C.T and MRI.
٢,١,٥. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص	2.1.5. Quality principles in the scholarly field	a.6. Identify surgical skills for basic ophthalmic procedures including (cataract and glaucoma surgeries, strabismus surgery, minor ophthalmic procedures). **A.7.** Identify of post operative complications, specially post operative endophthalmitis and provide first aid treatment in such conditions.
٢,١,٦. أساسيات وأخلاقيات البحث العلمي	2.1.6. Basis of research methodology and medical ethics.	a.11.State current research methodology, collection and interpretation of data to be able to carry out research projects on clinical aspects, referencing and skill in writing scientific papers. a.12.Define and commit to ethical and scientific basics of medical research.
2.2.المهارات الذهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**2.2. Intellectual Skills:** Upon completion of the master program of……, the graduate should be able to:	**2.2. Intellectual skills:** Upon completion of the master program (MSc) in Ophthalmology, the graduate must be able to:

2.2.1. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها لحل المشاكل	2.2.1. Use judgment skills for analytical and critical problem solving	**b1.** Specify medical dilemmas and complexities and how to solve them. **b2.** Make conclusions and be able to conduct scientific discussion. **b3.** Select from different choices based on multiple determining factors as social, scientific, economic etc… **b4.** Prioritize and tailor the different guidelines to individual situations, be aware of international guidelines like American Academy Ophthalmology and Royal College Guidelines. **b5.** Conduct ideal management of medical and surgical emergency states.
2.2.2. حل المشاكل المتخصصة مع عدم توافر بعض المعطيات	2.2.2. Capable of integrating knowledge and dealing with complex subjects to solve problems	B6. Be able to differentiate different emergency conditions in ophthalmology and manage them B7. Refine the surgical skills and performance to the state of the art.
2.2.3 الربط بين المعارف المختلفة لحل المشاكل المهنية	2.2.3. Be capable of integrating research results and/or results of history, physical and laboratory test findings to solve a research or a clinical problem.	b.8.Analyze and interpret any morphological abnormalities for both eyes and other systems.
2.2.4. إجراء دراسة بحثية و/أو كتابة دراسة علمية منهجية حول مشكلة بحثية	2.2.4. Effectively apply research methods and carrying out a medical research thesis	b.9. Analyze different research papers and choose best technique, microscopy and statistical & computer programs to interpret results. b.10. Compute research studies (thesis).
2.2.5. تقييم المخاطر في الممارسات المهنية في مجال التخصص	2.2.5. Be aware of risk management principles, and patient safety.	b.11. Apply safety measures during professional practicing in different ophthalmic surgery.
2.2.6. التخطيط لتطوير الأداء في مجال التخصص	2.2.6. Establish goals, commitments, and strategies for improved professional performance in the field of specialty	b.12. Design a plan for improving the departmental performance in the field of teaching and research. b.13. Design the principles and fundamentals of quality assurance of

		professional practice in the field of Ophthalmology.
2.2.7.اتخاذ القرارات المهنية في سياقات مهنية متنوعة.	2.2.7. Take professional situational decisions and logically support them.	b.14. Train the residents on decision making in different ophthalmic subspecialities.
3.2.المهارات المهنية: بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	**3.2. Professional Skills:** Upon completion of the master program of……, the graduate must be able to:	**2.3. (c) Professional and practical skills** Upon completion of the master program (MSc) in Ophthalmology, the graduate must be able to:
3.2.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص.	3.2.1. Master the basic and some advanced professional skills in his scholarly field.	**c1.** Take a focused medical history with proper analysis and conclusions. **c2.** Examine properly and systematically the eye and the adenexa with an exact follow of the standard rules and interpret signs individually. **c3.** Integrate data from the history and the examination done. **c4.** Ask for the proper investigations to be done for a given medical problem.
٣,٢,٢كتابة و تقييم التقارير المهني.	3.2.2. Write and evaluate medical or scientific reports	**C5**. Put a diagnosis and differential diagnosis of different cases.
٢,٣,٣تقييم الطرق والأدوات القائمة في مجال التخصص	3.2.3. Assess and evaluate technical tools during research	C6. Write a treatment prescription for a given medical problem within a multidisciplinary management plan if needed. C7. Identify patients needing hospitalization, and those needing surgical intervention. c.8 Analyze the collected data using different types of statistical programs as SPSS program.
4.2.المهارات العامة والمنتقلة :	4.2. **General and transferable skills**	**4.2. (d) General and transferable skills**

بانتهاء دراسة برنامج الماجستير يجب أن يكون الخريج قادرا على:	Upon completion of the master program of……, the graduate should be able to:	Upon completion of the master program (MSc) in Ophthalmology, the graduate must be able to:
٤,٢,١. التواصل الفعال بأنواعه المختلفة	4.2.1. Communicate effectively using a written medical record, electronic medical record, or other digital technology.	**d1.** Facilitate efficient communication skills using all sorts.
٤,٢,٢. استخدام تكنولوجيا المعلومات بما يخدم الممارسة المهنية	4.2.2. Use of information technology (computer to create, process, store, secure and exchange electronic data) in the field of medical practice.	D2. Facilitate information technology to improve professional practice.
4.2.3. لتقييم الذاتي وتحديد احتياجاته التعلمية الشخصية	4.2.3. Assess himself and identify personal learning needs	d.3. Interpret data of skills of self-evaluation and identification of personal learning needs.
4.2.4. استخدام المصادر المختلفة للحصول على المعلومات والمعارف	4.2.4. Use various sources for information (physical and digital sources).	d.4. Facilitate data gathering.
4.3.5. وضع قواعد ومؤشرات تقييم أداء الآخرين	4.2.5. Setting indicators for evaluating the performance of others	d.5. Facilitate capability to put roles and indicators for performance evaluation and appraisal.
4.2.6. العمل في فريق، وقيادة فرق في سياقات مهنية مختلفة	4.2.6. Work in a team, and Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	d.6. Analyze skills of effective time management.
4.2.7. إدارة الوقت بكفاءة	4.2.7. Manage time efficiently	d.7. Analyze Skills of self and continuous learning.
٤,٢,٨.التعلم الذاتي والمستمر	4.2.8. Demonstrate skills of self-learning and lifelong learning needs of medical profession.	d.8. Prepare and integrate scientific activities as seminars, journal clubs ,scientific meetings or conferences. Improve his practice through constant self-evaluation and life-long learning

Annex 5

نموذج رقم (١١ب)

جامعة/أكاديمية : المنيا.....
كلية / معهد: . الطب البشري.....
قسم: ..طب وجراحة العيون...

.

Master (MSc) of Ophthalmology	**مسمى البرنامج**
OO200	**كود البرنامج**

A. Matrix of Coverage of MSC Program ILOs By Course

Courses (List of courses in 1st and 2nd parts)	**Program Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
١.physiology	**A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12**	**b7 b10 b12 ,b4 b8 b9**	**c2 c3 c7 c8**	**D2, D3 D4 D6 D7 D8**
2-anatomy	**a8- a9**	**b7 b10 b12 b13**	**c2 c5 c7 c8**	**D1 d7 d8**
3-Optics	**a8- a9**	**b7, b8, b9**	**c2**	**d1, d4, d6, d7**

4-General medicine	**A10, a11, a12**	**B2, b3, b6, b8**	**C5, c8**	**D2, d5. D6. D8**
5-General surgery	**A1, a3**	**B1, b3, b8, b9**	**C3, c5, c6, cv7**	**D8**
6-Medical ethics	**A1, a2, a3**	**B1, b, b6, b7,**	**C2, c3, c4**	**D2, d5. D6**
7- Ophthalmic medicine	**A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12**	**B1, b, b6, b7, b9, b10, b11, b12, b13. b14**	**C4, c5, c7, c8**	**d2, d3, d4, d7, d8, d9**
8-Ophthalmic surgery	**A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12**	**B1, b, b6, b7, b9, b10, b11, b12, b13. b14**	**C2, c3, c4, c5**	**d2, d3, d4, d7, d8**
9-Pathology	**A1, a2, a3**	**B1, b3, b8, b9**	**C3, c5, c6, c7**	**d1, d4, d6, d7**

B.Matrix of Coverage of Course ILOs by Methods of teaching and learning

Methods of Teaching & Learning	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B1,B2,B3,B4,B5, B6,B8, B9,B10	C1,C2,C3,C4,C5 ,C6, C7,C8	D2,D3,D4,D5,
CIVA/ OSCE exams	A5,A6,A7,A8	B6,B7,B8,B9,B10	C1,C2,C5,C6 ,C7,C8	D1,D2,D3,D4,D5, D6,D7,D8
Presentation/seminar Journal club Thesis discussion Training courses & workshops	A1,A2,A3,A4, A5,A6,A7,A8	B1,B2,B3,B4,B5, B6,B7,B8,B9,B10 ,B11,B12,B13.B14	C1,C2,C3,C4,C5 ,C6, C7,C8	D1,D2,D3,D4,D5, D6,D7,D8

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Paper based exam	A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12	B1,B2,B3,B4,B5,B6,B8, B9,B10	C6, C7,C8	D2,D3,D4,D5,D6,
CIVA/ OSCE exam	A5,A6,A7,A8	,B3,B4,B5,B6,B8	C1,C2,C5,C6 ,C7,C8	D1,D2,D3,D4,D5,D6,D7,D8
Oral Exam	A1,A2, A3,A4,A6, A7,A8	B1,B2,B3,B4,B5,B6,B8, B9,B10		D1,D2,D3,D4,D5,D6,D7,D8
Seminars, presentations, Assignments, Logbook assessment	A1,A2,A3,A4, A5,A6,A7,A8	B1,B2,B3,B4,B5,B6,B7,B8,B9 ,B10,B11,B12 B13,B14	C1,C2,C3,C4,C5, C6, C7,C8	D1,D2,D3,D4,D5,D6,D7,D8

Course Specifications of Physiology in Master degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: **Ophthalmology**

<table>
<tr><td colspan="3">1. Course Information</td></tr>
<tr><td>• Academic Year/level: first part</td><td>• Course Title: course specification of Physiology in Master degree in Ophthalmology</td><td>• Code: OO200 maser</td></tr>
<tr><td colspan="3">• Number of teaching hours:
- Lectures: Total of 22 hours
- Practical/clinical: Total of 0 hours</td></tr>
<tr><td>2. Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:
The broad aim of the course is to educate students about Physiology of the Eye also to provide the students with updated data and researches concerned the eye, adnexae and nervous system, including related general physiology (its laws and phenomena). This extends to the organization, function, mechanism of action, regulation and adaptations of structures and their component tissues relevant to clinical methods of assessment (e.g. acuity, visual fields, electrodiagnostic, and intraocular pressure).</td></tr>
<tr><td colspan="3">3. Intended learning outcomes of course (ILOs):
Upon completion of the course, the student should be able to:</td></tr>
<tr><td>A- Knowledge and Understanding</td><td colspan="2">A1. Recognize and describe Eyebrows, Eyelids, and Face: Structure and Function.
A2 Recognize and describe the lens and iris & pupil function.
A3 Recognize molecular basis of The Tear Film and factors affecting it.
A4 Explain the basis of aqueous humor: Secretion and Dynamics and its effect on intraocular pressure.</td></tr>
</table>

	A5 Discuss the physiologic basis of Ocular Circulation. A6 Recognize the basics of Metabolism and Photochemistry of the Retina. A7 Recognize physiologic basis of Color Vision. A8 Recognize physiologic basis of visual adaptation. A9 Recognize physiologic basis of Electrical Signals of the Retina and Visual Cortex. A10 Recognize basis of Visual Function Testing. A11 Explain the physiology of the Entoptic phenomena and after images. A12 Explain physiology of Visual pathway Dysfunction. A13 Explain d physiologic basis of binocular v
B- Intellectual Skills	B1. Interpret on some clinical parameters such as: ERG, EOG, and VEP. B2. Interpret the clinical situations resulting from physiological malfunction. B3. Interpret the variable methods for testing ocular functions. B4. Integrate the physiology of the eye with other basic and clinical sciences. B5. Choose the proper ocular therapy
C- Professional and Practical Skills	C1. Write and evaluate investigative reports for basic ophthalmic testing (electrodiagnostic, pentacam, Optical coherence tomography)
D- General and transferable Skills	D1. Organize the use of different sources to obtain information and knowledge. D2. Make use of time efficiently. D3. Select self learning continuously.

4. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
I-Phsiology of cornea	**3**	**-**	**3**
II- physiology of lens.	**8**	**-**	**8**
III- Physiology of iris.	**2**	**-**	**2**
IV- Physiology of retina.	**2**	**-**	**2**
V- Physiology of vision .	**2**	**-**	**2**
VI-Physiology of ciliary body.	**2**	**-**	**2**
VII-Physiology of choroid.	**3**	**-**	**3**
Total	**22**	-	**22**

5. Teaching and Learning Methods	Didactic (lectures, seminars, tutorial) Observation and supervision
6. Teaching and Learning Methods for students with limited Capacity	Didactic lectures and group discussions
7. Student Assessment	
A. Student Assessment Methods	1-paper based examination to asses knowledge & understanding. 2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook
B. Assessment Schedule (Timing of Each Method of Assessment)	1-Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook
C. Weighting of Each Method of Assessment	paper based exams 24, oral exams 36
8. List of References	
A. Course Notes/handouts	Course Notes: lecture notes prepared by staff members in its department
B. Essential Books	Forrester, J. V., Dick, A. D., McMenamin, P., Roberts, F., & Pearlman, E. (2021). *The eye*. Elsevier.
C. Recommended Text Books	Remington, L. A., & Goodwin, D. (2021). *Clinical Anatomy and Physiology of the Visual System E-Book*. Elsevier Health Sciences.
D. Periodicals, websites	

Course Coordinator/s:

Dr Ahmed Mohamed Sabrey

Dr Sahar Torkey Abdelrazik Abdelaziz

Dr Mohamed Farag Khalil

Head of Department: Prof Dr: Ahmed kamal EL Shafei

Date of <u>last update</u>& approval by department Council: 6-3-2023

نموذج رقم (١١أ)

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: قسم طب وجراحة العيون.....

مسمى المقرر	الدوره الخاصه بتدريس ماده الفسيولوجى لطلاب درجه الماجستير
كود المقرر	OO200

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
I-Physiology of cornea		A5,A6,A7,A8	B1,b2,b3,b4.b5	C1	**D1**
II-physiology of lens (4 hrs) .		A5,A4,A7,A8	B1,b2,b3,b4.b5	**C1**	**D1, D2, D3**

III- physiology of retina.		**A1, A2, A4, A6**	**B1,b2,b3,b4.b5**	C1	**D1**
IV- physiology of vision.		**A5, A6, A7, A9**	**B1,b2,b3,b4.b5**	C1	**D1**
V- physiology of ciliary body		**A5, A6, A7,** **A8,A10,A11,A12,A13**	**B1,b2,b3,b4.b5**	C1	**D1**
VI- physiology of choroid		**A2, A3, A5, A8 A10,** **A11,A12,A13**	**B1,b2,b3,b4.b5**	C1	**D1**
VII- physiology of optic nerve		**A5, A6, A7, A5**	**B1,b2,b3,b4.b5**	C1	**D1, D2, D3**

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1-13	B1-B5		D1, D2, D3
Practical			C1	D1

B. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1-A13	B1-B5		
Oral Exam	A1-A13	B1-B5		

Blueprint of Physiology for Ophthalmology MSc degree

Postgraduate Physiology Course for Master's degree (1st part) of Ophthalmology Department (Code: OO 200) (60 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1-Physiology of cornea	3	75	25	13.6	A1	3.5	3.5
2-physiology of lens .	3	75	25	13.6	A2	3	3
3- physiology of retina.	4	75	25	18.1	A3	4	4
4- physiology of vision.	3	75	25	13.6	A4	3	3
5- physiology of ciliary body	3	75	25	13.6	A5	3.5	3.5
6- physiology of choroid	3	75	25	13.6	A6	3.5	3.5
7- physiology of optic nerve	3	75	25	13.6	A7	3.5	3.5
Total	22			100%	-	24	24

Course Specifications of Anatomy in Master degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology department

1. Course Information		
• **Academic Year/level:** first part	• **Course Title:** course specification of Anatomy in Master degree in Ophthalmology	• **Code**: OO200
• **Number of teaching hours:** **-Lectures:** 5hrs/w, 15 weeks, Total: 75hrs **- Practical/clinical:** Total of 0 hours		
2. Overall Aims of the course	The broad aim of the course is to educate students about Anatomy of the Eye also to provide the students with updated data and researches concerned the eye, adnexa and nervous system	
3. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***		
A- Knowledge and Understanding	A1.Describe the normal anatomy, embryologic development, physiology, and biochemistry of the crystalline lens. A2 Describe the basic structure of the retina and its relationship to the vitreous and choroids. A3 Describe the anatomy of the cornea& conjunctiva. A4 Define the anatomy of iris &pupil. A5 Define the anatomy of the vascular system.	

	A6 Describe the normal anatomy and function of orbital and periocular tissues. A7 Outline the anatomy of the extraocular muscles and their fascia. A8 Outline the anatomy of ciliary body & trabecular meshwork. A9 Define the anatomy of the visual pathway in order to localize lesions
B- Intellectual Skills	B1. Compare congenital anomalies of the lens. B2. Summarize the developmental alterations that lead to structural changes of the cornea. B3. Correlate clinical and pathologic findings that differentiate intraocular tumors. B4. Review anatomy of other cranial nerves. B5. Correlate the physiology and neuro-anatomy of the pupil, cranial nerves, and the visual sensory and ocular motor pathways. B6. Interpret the most important anatomic land marks. B7. Correlate the surgical anatomy of his clinical practice. B8. Integrate the anatomy with other basic and clinical sciences.
C- Professional and Practical Skills	**By the end of the course the candidate will be able to:** c1-Assess parts of visual tract and its development. c2-Master structures forming the eye. C3- Master how to examine the eye in a child or adult
D- General and transferable Skills	**By the end of the course the candidate will be able to:** d1. Analyze scientific English and medical terminology (verbal and written) in an understandable, logical, concise manner. d2. Interpret data of library search or an internet search, collect data and present a concise review about a chosen topic. d3. Interpret data of anatomic principles during the course and throughout their careers. d4. Analyses anatomical specimens (dead bodies, anatomical parts and bones) with respect.

4. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
Anatomy of cornea	5	-	5
Anatomy of lens	3	-	3

Anatomy of uvea	2	-	2
Anatomy of extraocular muscles	1.5	-	1.5
Anatomy of cranial nerves, neuro-ophthalmology	2	-	2
Anatomy of retinal layers	1	-	1
Anatomy of orbit	3	-	3
Total	**17.5**	-	**17.5**

5. Teaching and Learning Methods	Didactic (lectures, seminars, tutorial) Observation and supervision
6. Teaching and Learning Methods for students with limited Capacity	Didactic lectures and group discussions
7. Student Assessment	
A. Student Assessment Methods	1-paper based examination to asses knowledge & understanding. 2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook
B. Assessment Schedule (Timing of Each Method of Assessment)	1-Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook
C. Weighting of Each Method of Assessment	paper based exams 40 %, oral exams 60 %
8. List of References	
A. Course Notes/handouts	Course Notes: lecture notes prepared by staff members in the department
B. Essential Books	Forrester, J. V., Dick, A. D., McMenamin, P., Roberts, F., & Pearlman, E. (2021). *The eye*. Elsevier.
C. Recommended Text Books	Remington, L. A., & Goodwin, D. (2021). *Clinical Anatomy and Physiology of the Visual System E-Book*. Elsevier Health Sciences.
D. Periodicals, websites	

Course Coordinator/s:
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Dr Ahmed shawkat Mohamed Abdelhalim

Head of Department:
Prof Dr: Ahmed Mohamed Kamal Elshafie

Date of last update& approval by department Council: 6-3-2023

نموذج رقم (١١أ)

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: قسم التشريح.....

مسمى المقرر	الدوره الخاصه بتدريس ماده التشريح لطلاب درجه الماجستير
كود المقرر	AN master 200

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
I-Anatomy of cornea		**A5, A6, A7, A8**	**B4, B7, B6**	**C1,C2,C3**	**D1,2,3,4**
II-Anatomy of retinal layers		**A2, A3, A5, A8**	**B2, B3, B7**	**C1,C2,C3**	**D1,2,3,4**

III-Anatomy of iris		**A1, A2, A4, A6**	**B4, B5, B7**	**C1,C2,C3**	**D1,2,3,4**
IV-Anatomy of optic nerve		**A5, A6, A7, A9**	**B4, B7, B8**	**C1,C2,C3**	**D1,2,3,4**
V-Oculomotor ,trochlear and abducent nerves.		**A5, A6, A7, A8**	**B4, B7, B6**	**C1,C2,C3**	**D1,2,3,4**
VI-Ciliary body anatomy		**A2, A3, A5, A8**	**B2, B3, B7**	**C1,C2,C3**	**D1,2,3,4**
VII-Anatomy of lens		**A1, A2, A4, A6**	**B4, B5, B7**	**C1,C2,C3**	**D1,2,3,4**

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1-A9	B1-B8	C1, C2, C3	D1,2,3,4
Presentation/seminar	A1-A9	B1-B8	C1, C2, C3	D1,2,3,4
Journal club	A1-A9	B1-B8	C1, C2, C3	D1,2,3,4
Training courses & workshops	A1-A9	B1-B8	C1, C2, C3	D1,2,3,4

B. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1-A9	B1-B8		
Oral Exam	A1-A9	B1-B8		

Blueprint of Anatomy for Ophthalmology MSc degree

Postgraduate Anatomy Course for Master's degree (1st part) of Ophthalmology Department (Code: OO 200) (60 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1. Anatomy of cornea	10.5	75	25	14	A1	3.5	3.5
2. Anatomy of lens	10.5	75	25	14	A2	3	3
3. Anatomy of uvea	10.5	75	25	14	A3	3.5	3.5
4. Anatomy of extraocular muscles	10.5	75	25	14	A4	3.5	3.5
5. Anatomy of cranial nerves, neuro-ophthalmology	10.5	75	25	14	A5	3.5	3.5
6. Anatomy of retinal layers	11	75	25	16	A6	3.5	3.5
7. Anatomy of orbit	10.5	75	25	14	A7	3.5	3.5
Total	75			100%	-	24	24

Course Specifications of Optics in Master degree

University: Minia

Faculty: Medicine

Department: Ophthalmology

<table>
<tr><td colspan="3">1. Course Information</td></tr>
<tr><td>• Academic Year/level: first part</td><td>a)
• Course Title: optics</td><td>• Code OO200..</td></tr>
<tr><td colspan="3">• Number of teaching hours:
-Lectures: 1.5hrs/w, 15 weeks, Total: 20 hrs
- Practical/clinical: Total of 10 hours</td></tr>
<tr><td>2. Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:
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.</td></tr>
<tr><td colspan="3">3. Intended learning outcomes of course (ILOs):
Upon completion of the course, the student should be able to:</td></tr>
<tr><td>A- Knowledge and Understanding</td><td colspan="2">A1.Define the theory and terminology of physical optics. A2 Recognize the clinical and technical relevance of such optical phenomena as interference, coherence, polarization, diffraction, and scattering.
A3 Explain the basic properties of laser light.
A4 Outline the principles of light propagation and image formation and some properties as refraction,</td></tr>
</table>

	reflection, magnification, and vergence. A5 Label optical models of the human eye and how to apply them. A6 Discuss the various types of visual perception and function, including visual acuity, brightness sensitivity, color perception, and contrast sensitivity. A7 List the indications for prescribing bifocals and common difficulties encountered in their use. A8 Recognize the optical principles underlying various modalities in refractive correction: spectacles, contact lenses, intraocular lenses, and refractive surgery. A9 Recognize the basic methods of calculating intraocular powers and the advantages and disadvantages of the different methods.
B- Intellectual Skills	B1. relate the steps for performing streak Retinoscopy. B2 relate the steps for performing a manifest refraction using a phoropter or trial lenses. B3 recognize the use of the Jackson cross cylinder. B4 recognize the indications for prescribing bifocals and common difficulties encountered in their use. B5 relate the materials and fitting parameters of both soft and rigid contact lenses. B6 recognize the optical principles underlying various modalities in refractive correction: spectacles, contact lenses, intraocular lenses, and refractive surgery. B7 compare the basic methods of calculating intraocular powers and the advantages and disadvantages of the different methods. B8 interpret the conceptual basis of multifocal IOLs and how the correction of presbyopia differs between these IOLs and spectacles.

C- Professional and Practical Skills	C1. Master the basics of general optics. C2.Use information technology to support decisions related to optics of ophthalmology. C3.Examine optics of devices related to ophthalmology
D- General and transferable Skills	**By the end of the course the candidate will be able to:** d1. Analyze scientific English and medical terminology (verbal and written) in an understandable, logical, concise manner. d2. Interpret data of library search or an internet search, collect data and present a concise review about a chosen topic. d3. Interpret data of opticc principles during the course and throughout their careers.

4. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
1-Nature of light, properties of light	1	1	2
2-Reflection: plane, spherical mirrors	1	1	2
3- Refraction: Plane, convex lens, concave lens, prisms, cylindrical lenses, toric réfraction of the eye	1	1	2
4- Aberrations	1	1	2
5-Errors of refraction, accommodation, retinoscopy, visual acuity	1	1	2
6- Appliances: Spectacles, Contact lenses, Intra ocular lenses, Low vision aids	1	1	2
7- Instruments: Microscopy , operating microscope , Slit	1	1	2

Lamp , Fundus Camera Refractometers , Keratometers , OCT, pentacam, visual field, Electrodiagnostic testings Orthoptic devices			
5. Teaching and Learning Methods	• Didactic (lectures, seminars, tutorial) Observation and supervision		
6. Teaching and Learning Methods for students with limited Capacity	• Extra Didactic (lectures, seminars, tutorial) according to their needs • Extra clinic work according to their needs		
7. Student Assessment			
A. Student Assessment Methods	1-paper based examination to asses knowledge & understanding. 2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook		
B. Assessment Schedule (Timing of Each Method of Assessment)	1-Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook		
C. Weighting of Each Method of Assessment	paper based exams 24, oral exams 36		
8. List of References			
• **Course Notes/handouts**	• Course notes • Staff members print out of lectures and/or CD copies		
• **Essential Books**	Fundamentals of optics , by Francis Jenkins and Harvey White, Mc Graw Education, (2001)		
• **Recommended Text Books**	-Elkington, A. (2006). Clinical optics. Blackwell		

	- Bass M, Enoch JM, Lakshminarayanan V. Handbook of Optics; Vision and Vision Optics 3rd ed. New York: The McGraw-Hill Companies 2010
• **Periodicals, websites**	http://www.learnerstv.com/ British journal ophthalmology: http://www.BJO.com

Course Coordinator/s:
Dr Mohamed Farouk Sayed Othman

Dr Hosney Ahmed Zein Abdelalim

Head of Department:
Prof. Dr. Ahmed Mohamed Kamal Elshafie

Date of <u>last update</u> & approval: 06/03/2023

نموذج رقم (١١أ)

مسمى المقرر	الدوره الخاصه بتدريس ماده البصريات لطلاب درجه الماجستير
كود المقرر	OO 200

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: طب وجراحة العين.....

Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
light refraction		1-6	B1,b2,b3,b4,b5	C1,c2,c3	D3

light distortion		**A1, A2, A4, A6**	**B4, B5, B7**	**C1, C3**	**D1**
light reflection		**A5, A6, A7, A9**	**B4, B7, B8**	**C2, C3**	**D1**
General optics		**A5, A6, A7, A8**	**B4, B7, B6**	**C3**	**D1**
devices		**A2, A3, A5, A8**	**B2, B3, B7**	**C3**	**D1,D2.D3**

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1-A9	B1-B8		D1,2,3
Practical			C1, C2,C3	D1,D2,D3

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Paper-based exam	A1-A9	B1-B8		
CIVA exam			C1, C2,C3	
OSCE exam			C1, C2,C3	
Oral Exam	A1-A9	B1-B8		

Blueprint of Optics for Ophthalmology MSc degree

Postgraduate Optics Course for Master's degree (1st part) of Ophthalmology Department (Code: OO 200) (60 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1-Nature of light, properties of light	4	75	25	13.3	A1	3	3
2-Reflection: plane, spherical mirrors	4	75	25	13.3	A2	3	3
3- Refraction: Plane, convex lens, concave lens, prisms, cylindrical lenses, toric réfraction of the eye	4	75	25	13.3	A3	3	3
4- Aberrations	4	75	25	13.3	A4	3	3
5-Errors of refraction, accommodation, retinoscopy, visual acuity	4	75	25	13.3	A5	3.5	3.5
6- Appliances: Spectacles, Contact lenses, Intra ocular lenses, Low vision aids	4	75	25	13.3	A6	3.5	3.5
7- Instruments: Microscopy, operating microscope, Slit Lamp , Fundus Camera Refractometers , Keratometers , OCT, pentacam, visual field, Electrodiagnostic testings Orthoptic devices	6	75	25	20	A7	5	5
Total	30			100%	-	24	24

Course Specification of Medical Ethics

Master degree of ophthalmology (2022-2023)

University: Minia

Faculty: Medicine

Program on which the course is given: Master degree of ophthalmology
Major or minor element of program: Medical ethics, ethics of medical research
Department offering the program: ophthalmology Department
Department offering the course: Forensic Medicine & Clinical Toxicology Department
Academic year / Level: First part

A. Basic Information		
• **Academic Year/level:** Post graduate; 1st Part MSC, ophthalmology	• **Course Title**: b) Course Specification of Medical Ethics (Master degree of ophthalmology)	• **Code**:

• **Number of teaching hours:** - **Lectures:** Total of 30 hours; ٢ hour/week - **Practical:** Total of 15 hours; 1 hour/week
) B- Professional Information

1. Overall Aims of the course	By the end of the course the student should be able to identify the value of studying and practicing medicine, the duties of doctors towards their patients, colleagues and community, the ethics in medical consultations among colleagues and also able to explain respect the patient's confidentiality and secrets, recognize the role of health care providers in the community and describe medical errors, negligence and legal issues, ethics of medical research especially on human beings and finally able to explain ethics and evidence based medicine
2. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A- Knowledge and Understanding	**A.1**- Identify the basic concept of learning and practicing medicine from the religious and human point of view. **A.2-** Identify the very beneficial impressive history of medicine; ethics related. **A.3-** Classify the main principles of medical ethics. **A.4-** Recognize an integrated approach to deal with patients, their families, community and medical staff in an ethical, legal and human manner. **A.5-** Identify rules in low and regulations to deal with patients in practicing medicine. **A.6-** Explain the standard and accredited methods of clinical research especially on human beings.
B- Intellectual Skills	**B.1-** Design approach to patients in different situations; critical and noncritical ones. **B.2-** Develop adequate communication skills with patients, community and colleagues. **B3-** Conclude in medical researches on clear ethical basis. **B.4-** Use knowledge and learn according to standard basis worldwide.

	B.5- Apply and practice medicine according to concepts of evidence based medicine. **B.6-** Recognize common ethical dilemma and suggest a proper solution.
C- Professional and Practical Skills	**C.1-** Use a high professional approach with colleagues and patients. **C.2-** Modify steps of upgrading his/her educational, academic and clinical carriers. **C.3-** Use the standard guidelines in managing patients. **C.4-** Identify what is called as clinical governance and auditing his /her Performance.
D- General and transferable Skills	**D.1-** Identify how to respect his/herself and the profession. **D.2-** Develop adequate behavior and skill communications with community. **D.3-** Modify life and live like others sharing social and national affairs. **D.4-** Develop the capacity of helping people and share in upgrading their culture and education. **D.5-** Identify how to participate in the national and social affairs and responsibilities.

3- Course Contents

TOPIC	Lecture Hours	Practical Hours	Total hours
Medical Responsibility and Duties of the physician	2	1	3
Medicolegal aspect of cloning	2	1	3
Defensive Medicine	2	1	3
Diagnosis of death & Death Certificates	2	1	3
Consent in medical field	2	1	3
Medical malpractice	2	1	3
Medical syndicate	2	1	3
Professional secrecy	2	1	3
Physician disciplinary proceeding	2	1	3
Domestic Violence	2	1	3
Euthanasia (Mercy death)	2	1	3
Ethics in medical research	2	1	3
Medical reports	2	1	3
Rules of using addictive drugs among physicians	2	1	3
Medical certificates	2	1	3
Total	(30 hr.) ٢/W	(15 hr.) 1/W	(45 hr.) 3/W

4- Teaching and Learning Methods	4.1 - Straight lectures; power point presentations 4.2 - Practical lessons 4.3 - Brain storming with the students 4.4 - Questions and Answers
5- Teaching and Learning Methods to students with limited Capacity	(Not applicable)
6- Student Assessment	
A. Student Assessment Methods	**TENDANCE CRITERIA**: by Faculty laws (log book) **ASSESSMENT TOOLS:** *Final Written exam: short essay to asses knowledge and understanding. problem solving to asses intellectual skills MCQ to assess knowledge and intellectual skills. *Oral exam; to asses knowledge and understanding. Also intellectual skills, attitude, and communication. *Practical exam: to assess practical and professional skills.
B. Assessment Schedule	B- Final Written exam week: 24-28 C- Oral exam week: 24-28 D- Practical exam week: 24-28
C. Weighting of Assessment	• Final Written exam 40% (40 Marks) • Oral & Practical exams 60% (60 Marks) • Total 100% (100 Marks)
7- List of References	

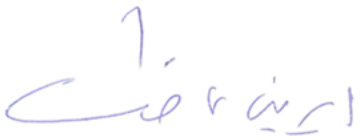
• **Course Notes/handouts**	Department book by staff members. Log Book.
• **Essential Books (text books)**	Medical Ethics Manual, 2nd Edition John R. Williams, 2009. Medical Ethics, 2nd Edition, Michael Boylan, 2014.
• **Recommended Books**	Text book of medical ethics, Erich H. Loewy, 1989
• **Periodicals**	المقالة II. Journal of Medical Ethics المقالة III. Journal of Medical Ethics and History of Medicine
• **Web sites**	المقالة IV. https://en.wikipedia.org/wiki/Medical_ethics https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5074007/
8- Facilities required for teaching and learning	المقالة V. Classrooms for theoretical lectures and tutorials

Course Coordinators:

Prof. Dr. Morid Malak Hanna

Dr. Mennatallah Mahmoud Ahmed

Head of Department: **Prof. Dr. Irene Atef Fawzy**



Date of last update & approval by department council: 5/3/2023

Course Specification of Medical Ethics **Master degree of ophthalmology** **(First part))**	**مسمى المقرر**
	كود المقرر

جامعة/أكاديمية : .....المنيا.....

كلية / معهد: .....الطب البشرى.....

قسم: .....الطب الشرعى والسموم الأكلينكية.....

A. The Matrix of Coverage of Course IL by Contents

Contents	**Intended Learning Outcomes (ILOs)**			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Medical Responsibility and Duties of the physician	**A1,3**	**B4**	**C1**	**D1,2**
Medicolegal aspect of cloning	**A1,2**	**B3**	**-**	**-**
Defensive Medicine	**A4,5**	**B6**	**C3**	**D3**
Diagnosis of death & Death Certificates	**A1,2**	**B2**	**-**	**-**
Consent in medical field	**A2,5**	**-**	**-**	**-**
Medical malpractice	**A1,6**	**B5**	**C4**	**D5**
Medical syndicate	**A5,6**	**B3**	**-**	**-**

Professional secrecy	**A1,2,3**	**-**	**-**	**D4**
Physician disciplinary proceeding	**A2,4,5**	**B2**	**-**	**D1.2,3**
Domestic Violence	**A2,4,6**	**-**	**C2**	**-**
Euthanasia (Mercy death)	**A1,3,4**	**B1**	**-**	**-**
Ethics in medical research	**A1,2**	**-**	**-**	**-**
Medical reports	**A3,4**	**-**	**C1,2**	**D1.2**
Rules of using addictive drugs among physicians	**A1,4**	**B1,2**	**-**	**-**
Medical certificates	**A1,6**	**B3,5**	**C3**	**D1,4**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	**A1,2,3,4,5,6**	**B1,2,3,4,5,6**	-	-
Practical	-	-	**C1,2,3,4**	-
Presentation/seminar	-	-	-	**D1,2,3,4,5**
Journal club	-	-	-	-
Thesis discussion	-	-	-	-
Training courses & workshops	-	-	-	**D1,2,3,4,5**

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1,2,3,4,4,5,6	B1,2,3,4,5	-	-
Practical exam	-	-	C1,2,3,4,5	-
Oral Exam	A1,2,3,4,4,5,6	B1,2,3,4,5	-	-

Blueprint of 1st master of ophthalmology
Postgraduates" Medical Ethics Examination Paper (40 marks)

	Topic	Hours	Knowledge %	Intellectual %	% of topic	N of items Per topic	Knowledge	
							N of items	Mark
1	**Medical Responsibility and Duties of the physician & Defensive Medicine**	4	75	25	**13.32**	1	1	**5.32**
2	**Medicolegal aspect of cloning**	2	75	25	**6.66**	1	1	**2.66**
3	**Diagnosis of death & Death Certificates**	2	75	25	**6.66**	1	1	**2.66**
4	**Consent in medical field & Medical malpractice**	4	70	30	**13.32**	1	1	**5.32**
5	**Medical syndicate &Professional secrecy**	4	75	25	**13.32**	1	1	**5.32**
6	**Physician disciplinary proceeding & Euthanasia (Mercy death)**	4	75	25	**13.32**	1	1	**5.32**
7	**Domestic Violence**	2	70	30	**6.66**	1	1	**2.66**
8	**Ethics in medical research**	2	80	20	**6.66**	1	1	**2.66**
9	**Medical reports & Medical certificates**	4	80	20	**13.32**	1	1	**5.42**
10	**Rules of using addictive drugs among physicians**	2	75	25	**6.76**	1	1	**2.66**
	Total	**30**			**100%**			**40**

Course Specifications of Internal medicine in Master degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Internal Medicine, code OO200

Course Information	
• **Academic Year/level:** 1st part MSc Ophthalmology	**Course Title:** Course Specifications of Internal medicine in Master degree in Ophthalmology
• **Number of teaching hours: (24 week / 4 hours weekly)** - **Lectures:** Total of 40 hours - **Practical/clinical**: Total of 40 hours	
9. Overall Aims of the course	To deliver an advanced knowledge of main topics of internal medicine and its subspecialties relevant to Ophthalmology medicine; hence the candidate can recognize a wide range of medical problems; and establish an advanced skill to deal safely with the medical emergencies in Ophthalmology specialty.
10. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
E- Knowledge and Understanding	A1. Recognize the basic pathology and microbiology of medical diseases. A2. Identify the etiologies and risk factors of medical diseases. A3. List the differential diagnosis of medical problems. A4. Describe the various therapeutic models/alternatives used for medical problems. A5. Enumerate the common diagnostic and laboratory techniques necessary to solve medical problems.

	A6. Describe the mechanism of action, side effects and complications of common therapeutic drugs. A7. Mention the principles, ethics and legal aspects of professional practice in the field of internal medicine. A8. Select different diagnostic alternatives that help reaching a final diagnosis. A9. Plan to improve performance in the field of internal medicine.
F- Intellectual Skills	B1. Interpret data acquired through history taking to reach a provisional diagnosis for medical diseases. B2. Compare different diagnostic alternatives that reaching a final diagnosis. B3. Correlate between knowledge for professional problem solving. B4. Analyze reading of research and issues related to the internal medicine.
G- Professional and Practical Skills	C1. Take a good medical history and conduct a proper general examination. C2. Identify normal and abnormal physical signs by proper regional examination of the body. C3. Write and evaluate medical reports. C4. Identify a clear priority plan in the patient's management. C5. Assess methods and tools in diagnosis and management in internal medicine. C6. Interpret adequately the results of common laborato investigations. C7. Evaluate adequately the patient's acute morbidity score and need for urgent intervention.
H- General and transferable Skills	D1. Communicate effectively with patients and their families. D2. Assess himself and identify personal learning needs.

	D3. Develop personal skills in writing a case summary and a simple essay. D4. Prepare and present different topics using power point and data show. D5. Work in teamwork. D6. Present problematic internal medicine-cases in seminars.

Course Contents

Topic	Lecture hours	Practical/Clinical hours	Total No. of hours
1) Neurology: - Facial palsy - Myathenias - Myopathies - Peripheral neuropathy	10	10	20
2) **Hematology**: - Anemias - Coagulopathies - Platelet dysfunction disorders - Bleeding diathesis	10	10	20
3) Cardiovascular system:- - Hypertension - Infective endocarditis - Ischemic heart disease - Congestive heart failure	10	10	20
4) Endocrinology:- - Diabetes mellitus and its complications (acute and chronic).	10	10	20

- Parathyroid gland & Calcium homeostasis. - Thyroid diseases. - Hyperlipidemias.			
Total	40	40	80
11. Teaching and Learning Methods	1-Talk and chalk method in classes. 2-Powerpoint demonstration 3-Practical clinical examination in clinical wards. 4- Medical web sites in the Network. 5- Discussion of medical problems in clinical round. 6- Online lectures.		
12. Teaching and Learning Methods for students with limited Capacity	Special session for training and tutorials.		
13. Student Assessment			
D. Student Assessment Methods	1- Research assignment for the students to assess the general and transferable skills. 2- Log book to assess clinical and transferable skills, attendance to medical conferences and oral discussions of thesis. 3- Final paper based and commentary exam to assess Knowledge, understanding and intellectual skills. 4- Final oral exam to assess knowledge and understanding. 5- Final practical exam to assess practical skills.		
E. Assessment Schedule (Timing of Each Method of Assessment)	Assessment 1 … Assignment…. Week: 8-16-22 Assessment 2…according to department schedule. Assessment 3…. Final written exam. Week …24		

	Assessment 4 …Final practical exam Week: 24 Assessment 5…..Final oral exam Week….24
F. Weighting of Each Method of Assessment	Final-term Examination 40%, 24 marks Assignment and log book: 10 %, 6 marks Oral Examination. 20% , 12 marks Practical Examination 30 %, 18 marks _____ Total 100% Total marks: 60
14. List of References:	
E. Course Notes/handouts	Lecture notes prepared by staff members in the department.
F. Essential Books	Davidson's Principles and practice of medicine (24th Edition, 2023). Handbook of critical and intensive care (4th Edition, 2021). Methods of Clinical examination (Salah Ibrahim)
G. Recommended Text Books	Harrison's textbook of medicine (21st Edition, 2022) Cecil's essentials of internal medicine (26th Edition) Hutchison for clinical examination methods (25th Edition, 2022)
H. Periodicals, websites	https://pubmed.ncbi.nlm.nih.gov/ • https://diabetesjournals.org/care (Diabetes Care). • https://www.acpjournals.org/journal/aim (Annals Of Internal Medicine).

9- Facilities required for teaching and learning:	
	- Library in the hospital - NET data information - Clinical staff rounds and case presentations. - Lectures courts. - In patients clinical wards teaching (bed-side teaching) - Seminars. - Clinical rounds teaching in classrooms. - Medical conferences attendance. - Thesis discussion attendance.

Course Coordinator/s:

Prof. Dr. Sahar H. Elhiny

Dr. Nadia Ismail Abdulhameed

Head of Department:

Prof. Dr. Yousouf Ismail Mousa

Date of last update & approval by department Council: 6th March 2023

Course Specifications of Internal medicine in Master degree in Ophthalmology	مسمى المقرر
OO200	كود المقرر

نموذج رقم (١١)

جامعة/ المنيا

كلية / الطب

قسم/ الباطنة العامة

D. Matrix of Coverage of Course ILOs By Contents

Topic	Knowledge and understanding	Intellectual Skills	Professional and Practical Skills	General skills
1) Neurology:				
Facial palsy	A1-A9	B1-B4	C1-C7	D1,D6
Myathenias	A1-A9	B1-B4	C1-C7	D1-D6
Myopathies	A1-A9	B1-B4	C1-C7	D1-D6
Peripheral neuropathy	A1-A9	B1-B4	C1-C7	D1-D6
2) Haematology				
Anaemia	A1-A9	B1-B4	C1-C7	D1-D6
Coagulopathy	A1-A9	B1-B4	C1-C7	D1-D6
Platelet dysfunction disorders	A1-A9	B1-B4	C1-C7	D1-D6
Bleeding diathesis	A1-A9	B1-B4	C1-C7	D1-D6

3) Cardiovascular system				
Hypertension	A1-A9	B1-B4	C1-C7	D1-D6
Infective endocarditis	A1-A9	B1-B4	C1-C7	D1-D6
Ischemic heart disease	A1-A9	B1-B4	C1-C7	D1-D6
Congestive heart failure	A1-A9	B1-B4	C1-C7	D1-D6
4) Endocrinology				
Diabetes mellitus and its complications (acute and chronic).	A1-A9	B1-B4	C1-C7	D1-D6
Parathyroid gland & Calcium homeostasis.	A1-A9	B1-B4	C1-C7	D1-D6
Thyroid diseases	A1-A9	B1-B4	C1-C7	D1-D6
Hyperlipidemias.	A1-A9	B1-B4	C1-C7	D1-D6

B - Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Lecture	A1-A9	B1-B4		
Practical			C1-C7	D1-D6
Clinical (Including grand rounds)			C1-C7	D1-D6
Presentation/seminar	A1-A9			D1-D6
Journal club	A1-A9	B1-B4		
Training courses & workshops	A1-A9	B1-B4	C1-C7	D1-D6

c- Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1-A9	B1-B4		
Practical exam			C1-C7	
Clinical exam		B1-B4	C1-C7	
Oral Exam	A1-A9	B1-B4		
Assignment	A1-A9			D1-D6

Blue Print of Internal Medicine for candidates of master degree in Ophthalmology (first part)examination paper (24 marks)

	Topic	Hours	Knowledge%	Intellectual%	% of topic	Knowledge Mark	Intellectual Mark	Marks	Actual Mark
1	**1) Neurology:**	10	70	30	25%	4	2		**6**
2	2) **Hematology**:	10	75	25	25%	4	2		**6**
3	**3) Cardiovascular System**	10	75	25	25%	4	2		**6**
4	**4) Endocrinology**	10	75	25	25%	4	2		**6**
	Total	40			100%				**24**

Course specification of General Surgery Course

1st part Master degree of Ophthalmology

University: Minia

Faculty: Medicine

Department: General Surgery Code OO200

A-Basic Information

1- Course Ttitle and Code: General surgery for first part of master of Ophthalmology

2- Specialty: Ophthalmology

3- Level: First part of Master degree

4- Adopted system for selection & formation of examiners' committee:

Available	√	Not available	

5- System of external evaluation of the exam:

Available	√	Not available	

6- Number & Names of teaching staff members: 13

Prof. Ayman Hassanein

Prof. Amr Hamdy

Prof. Nasser Zagloul

Prof.Khaled Mahran

Prof. Tohamy Abdallah

Prof.Moatasem Mohamed Ali

Prof. Ashraf AdelAzzeem

Prof. Adfatah Saleh

Prof.Amr Abdelhamid

Ass.Prof. Ahmed Mohamed Kamal

Ass.Prof. Emadeldeen Mohamed Elsagheer

Ass.Prof. Ahmed Mohamed Attia

Ass.Prof. Alaa EL-sweefy

Course Information	
• **Academic Year/level:** 1st part MSc Ophthalmology	**Course Title:** Course Specifications of general surgery in Master degree in Ophthalmology

• **Number of teaching hours: (24 week / 4 hours weekly)** - **Lectures:** Total of 27 hours	
15. Overall Aims of the course	The broad aim of the course is to educate students about general Surgery in relation to the eye also to provide the candidates with updated data and researches.
16. Intended learning outcomes of course (ILOs):	***Upon completion of the course, the student should be able to:***
I- Knowledge and Understanding	A1. Understand the surgical skills for basic procedures. A2. Recognize medical and surgical emergencies and critical care conditions. A3. Recognize systemic and ophthalmology related disorders. A4. Identify tools necessary for the diagnosis of the diseases.
J- Intellectual Skills	B1 Differentiate medical dilemmas and complexities and how to solve them. B2 Conclude and conduct scientific discussion. B3 Select from different choices based on multiple determining factors as social, scientific, economic etc. B4 Prioritize and tailor the different guidelines to individual situations. B5 Conduct ideal management of medical and surgical emergency states. I6 Refine the surgical skills and performance to the state of the art.
K- Professional and Practical Skills	C1 Master taking medical history with proper analysis and conclusions.

	C2 Integrate data from the history and the examination done. C3 Decide the proper investigations to be done for a given medical problem. C4 Put a diagnosis and differential diagnosis of different cases. C5 Identify patients needing hospitalization, and those needing surgical intervention. C6 Identifying patients in need for higher specialization. C7 Perform different emergency and routine procedures related to ophthalmology.
L- General and transferable Skills	D1 Maintain honesty and integrity in all interactions with teachers, colleagues and others with whom physicians must interact in their professional lives. D2 Recognize the scope and limits of their role as students as well as the necessity to seek and apply collaboration with other workers. D3 Work cooperatively and show respect for other opinions. D4 Appraise responsibility towards work.

17.Course Contents

Topic	Lecture Hours	Practical/Clinical Hours	Total No. of hours
Parathyroid and Lymphadenopathy	1	2	3
Vasculitis and aneurysm	1	2	3

- Carotid artery disease	1	2	3
Maxillofacial trauma and fracture mandible	1	1	2
Head trauma and skull base fracture	1	1	2
Anatomy of neck, scalp and face	1	1	2
Toxic goiter	1	2	3
Jaw swellings	1	1	2
Face ulcers and scalp diseases	1	1	2
Hydrocephalus	1	2	3
Brain abscess	1	1	2
18.Teaching and Learning Methods	1-Lectures 2- grand rounds 3-Workshops.		
19.Teaching and Learning Methods for students with limited Capacity	Special session for training and tutorials.		
20.Student Assessment			

G. Student Assessment Methods	1- Research assignment for the students to assess the general and transferable skills. 2- Log book to assess clinical and transferable skills, attendance to medical conferences and oral discussions of thesis. 3- Final paper based and commentary exam to assess Knowledge, understanding and intellectual skills. 4- Final oral exam to assess knowledge and understanding. 5- Final practical exam to assess practical skills.
H. Weighting of Each Method of Assessment	Final-term Examination 40%, 24 marks Oral Examination.30% , 18 marks Practical Examination 30 %, 18 marks _____ Total 100% Total marks: 60
21. List of References:	
I. Course Notes/handouts	Lecture notes prepared by staff members in the department.
J. Essential Books	Doherty, G. M., & Way, L. W. (Eds.). (2010). *Current diagnosis & treatment: surgery* (pp. 493-498). New York, NY, USA:: Lange Medical Books/McGraw-Hill.

	Methods of Clinical examination (Salah Ibrahim)
K. Recommended Text Books	Hutchison for clinical examination methods (25th Edition, 2022)

مسمى المقرر	ماجستير طب العيون- جزء اول
كود المقرر	OO200

جامعة/أكاديمية : ..المنيا

كلية / معهد..الطب.....

قسم : **الجراحة العامة**

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
Parathyroid and Lymphadenopathy	1	**A1, 3**	**B2, 3, 5**	**C 1, 4, 5**	**D 1, 3, 4**
Vasculitis and aneurysm	2	**A2, 3**	**B2, 3, 5**	**C 1, 4, 5**	**D 1, 3, 4**
Carotid artery disease	3	**A1, 3**	**B2, 3, 5**	**C 1, 4, 5**	**D 1, 3, 4**

Maxillofacial trauma and fracture mandible	4	**A1, 3, 4**	**B1, 4, 5**	**C 2, 3,7**	**D 2, 3, 4**
Head trauma and skull base fracture	5	**A1, 3**	**B2, 3, 5**	**C 1, 4, 5**	**D 1, 3, 4**
Anatomy of neck, scalp and face	6	**A1, 3, 4**	**B1, 3, 5**	**C 2, 3,7**	**D 2, 3, 4**
Toxic goiter	7	**A1,2, 3**	**B2, 3, 5**	**C 1, 4, 5**	**D 2, 4**
Jaw swellings	8	**A1, 3, 4**	**B1, 4, 5**	**C 2, 3,7**	**D 2, 3, 4**
Face ulcers and scalp diseases	9	**A2, 4**	**B 3, 5**	**C 2**	**D 3, 4**
Hydrocephalus	10	**A1, 3, 4**	**B1, 3, 5**	**C 2, 3,7**	**D 2, 3, 4**
Brain abscess	11	**A1, 3**	**B2,4, 5**	**C 2, 3**	**D 1, 2**

B.Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4
Practical	A1, 3, 4	B1, 4, 5	C 2, 3,7	D 2, 3, 4
Presentation/seminar	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4
Journal club	A1, 3, 4	B1, 3, 5	C 2, 3,7	D 2, 3, 4
Thesis discussion	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4
Training courses & workshops	A1, 3, 4	B1, 4, 5	C 2, 3,7	D 2, 3, 4

C. Matrix of Coverage of Course ILOs by Methods of Assessment

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Written exam	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4
Oral/Clinical Exam	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4
Assignment	A1, 3	B2, 3, 5	C 1, 4, 5	D 1, 3, 4

Blueprint of General Surgery for Master of Ophthalmology (Written Exam)

(24 Marks)

Topic	Hours	Knowledge%	Intellectual%	% of topic	Mark	Actual mark
Parathyroid and Lymphadenopathy	1	70	30	9	2.18	3
Vasculitis and aneurysm	1	80	20	9	2.18	3
Carotid artery disease	1	70	30	9	2.18	2
Maxillofacial trauma and fracture mandible	1	70	30	9	2.18	2
Head trauma and skull base fracture	1	70	30	9	2.18	2
Anatomy of neck, scalp and face	1	70	30	9	2.18	2
Toxic goiter	1	80	20	9	2.18	2
Jaw swellings	1	70	30	9	2.18	2
Face ulcers and scalp diseases	1	70	30	9	2.18	2

Hydrocephalus	1	70	30	9	2.18	2
Brain abscess	1	70	30	9	2.18	2
Total	**11**			**100%**		**24**

Course Coordinator: Dr. Yasser Ali Kamal

Date of last update & approval by department council: 5/3/2023

Head of Department: Prof. Dr. Amr Hamdy

Course Specifications of Pathology in Master degree

University: Minia

Faculty: Medicine

Department: Ophthalmology

1. Course Information		
• **Academic Year/level: second part**	• **Course Title: pathology**	• **Code**: OO200
• **Number of teaching hours:** - **Lectures: 2** hours/week, total 30 hours - **Practical/clinical:** zero hours/week		
2. overall Aims of the course	By the end of the course the student must be able to:	

	The broad aim of the course is to educate students about Ocular Pathology also to provide the students with updated data and researches.
B. Intended learning outcomes of course (ILOs): ***Upon completion of the course, the student should be able to:***	
A.Knowledge and Understanding	A1. Recognize and define the basic pathologic processes that disturb the structure and function of the eye including cell injury, tissue response to injury (inflammation, healing and repair), neoplasia, infections and parasitic diseases. A2 Recognize and describe Congenital anomalies of the eye and its adnexa. A3 List the causes of common diseases affecting the eye. A4 Discuss the pathogenesis of common diseases affecting the eye. A5 Recognize and describe the basic pathologic features (morphologic alterations) including the gross and microscopic pictures of various common diseases affecting the eye. A6 Define the basis of Injuries of the eye. A7 Explain pathology of primary and secondary ocular tumors
B.Intellectual Skills	B1.Evaluate ocular pathological changes of eye structure in different diseases. B2. Evaluate any eye or biopsy that they have performed or assisted with.

	B3. Interpret any pathological changes. B4. Correlate macroscopic and microscopic pathological changes.
C.Professional and Practical Skills	C1. Prepare a proper pathology request (clinical history, location of biopsy, special requests). C2. Prepare a concise, pertinent and accurate pathology report. C3. The candidate should have knowledge of the value and the limitations of a pathology specimen and its report (e.g. inadequate biopsy, more or different tissue needed, biopsy not indicated), when to ask for another. C4. Integrate the pathology diagnosis into the complete care of the individual patient.
A- General and transferable Skills	D1.Perform data management including data entry and analysis.

C. Course Contents

Topic	Lecture	Practical/Clinical	Total No. of hours

	hours/week	hours/week	hours/week
1-Cornea: Congenital, Inflammatory, Ulcers, Pannus, keratoconus, Dystrophies.	1	1	2
2-Sclera: Inflammatory.	1	1	2
3-Uvea: Choroid,Ciliary body, Iris(Malignant,benign), Metastases Retinoblastoma	1	1	2
4-Orbit, lacrimal : Thyroid ophthalmopathy , Pseudotumour , Granuloma Tumours: lymphoid, vascular, muscular, lacrimal gland.	1	1	2
5- pathology of glaucoma (pseudoexfoliation, paediatric glaucoma, open angle glaucoma)	1	1	2
6- Lens: Congenital Cataract , Intra Ocular Lens implantation.	1	1	2
7-Retina : Haemorrhage, exudates, Retinal artery occlusion , Retinal vein occlusion, Retinopathies,	1	1	2

Retinal pigment, degeneration , Retinal detachment			
D. Teaching and Learning Methods	Didactic (lectures, seminars, tutorial) Observation and supervision		
E. Teaching and Learning Methods for students with limited Capacity	• Extra Didactic (lectures, seminars, tutorial) according to their needs • Extra clinic work according to their needs		
F. **Student Assessment**			
D. Student Assessment Methods	1-paper based examination to asses knowledge & understanding. 2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook		
E. Assessment Schedule (Timing of Each Method of Assessment)	1-Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook		
F. Weighting of Each Method of Assessment	paper based exams 80, oral exams 50, practical exams 50		

G. List of References	
• **Course Notes/handouts**	• Course notes • Staff members print out of lectures and/or CD copies
• **Essential Books**	*Yanoff, M., & Sassani, J. W. (2018). Ocular pathology. Elsevier Health Sciences.*
• **Recommended Text Books**	Naumann, G. O. (2012). *Pathology of the Eye*. Springer Science & Business Media.
• **Periodicals, websites**	

Course Coordinator/s:
Dr Heba Radi AttaAllah Atta

Head of Department:
Prof. Dr. Ahmed Mohamed Kamal Elshafi

Date of <u>last update</u> & approval by department Council:

6 / 03 /2023

نموذج رقم (١١أ)

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: طب وجراحة العين .....

مسمى المقرر	الدوره الخاصه بتدريس ماده الباثولوجي لطلاب درجه الماجستير
كود المقرر	LN 200 master

A.Matrix of Coverage of Course ILOs By Contents

Contents **(List of course topics)**	**Week No.**	**Intended Learning Outcomes (ILOs)**			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
1-Cornea: Congenital, Inflammatory, Ulcers, Pannus, keratoconus, Dystrophies.		**A1-A7**	**B1-B4**	**C1-C4**	**D3, D4**

2-Sclera: Inflammatory.		**A1-A7**	**B1-B4**	**C1-C4**	**D1**
3-Uvea: Choroid,Ciliary body, Iris(Malignant,benign), Metastases Retinoblastoma		**A1-A7**	**B1-B4**	**C1-C4**	**D1**
4-Orbit, lacrimal : Thyroid ophthalmopathy , Pseudotumour , Granuloma Tumours: lymphoid, vascular, muscular, lacrimal gland.		**A1-A7**	**B1-B4**	**C1-C4**	**D1**

5- pathology of glaucoma (pseudoexfoliation, paediatric glaucoma, open angle glaucoma)		**A1-A7**	**B1-B4**	**C1-C4**	**D1**
6- Lens: Congenital Cataract , Intra Ocular Lens implantation.		**A1-A7**	**B1-B4**	**C1-C4**	**D1**
7-Retina : Haemorrhage, exudates, Retinal artery occlusion , Retinal vein occlusion, Retinopathies, Retinal pigment, degeneration , Retinal detachment		**A1-A7**	**B1-B4**	**C1-C4**	**D1**

B.Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1-A7	B1-B4		D1
Practical			C1-C4	D1
Presentation/seminar	A1-A7	B1-B4		D1
Journal club	A1-A7	B1-B4		D1
Thesis discussion	A1-A7	B1-B4		D1
Training courses & workshops	A1-A7	B1-B4		D1

C.**Matrix of Coverage of Course ILOs by Methods of Assessment**

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Paper based exam	**A1-A7**	**B1-B4**		**D1**
OSCE/CIVA exam			**C3, C4, C5, C8**	**D1**
Clinical exam			**C4, C5, C6, C8**	**D1**
Oral Exam	**A1-A7**	**B1-B4**		**D1**

Blueprint of pathology for Ophthalmology MSc degree

Postgraduate Pathology Course for Master's degree (2nd part) of Ophthalmology Department (Code: OO 200) (190 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1-Cornea: Congenital, Inflammatory, Ulcers, Pannus, keratoconus, Dystrophies.	4	75	25	13	A1	11	11
2-Sclera: Inflammatory.	4	75	25	13	A2	11	11
3-Uvea: Choroid,Ciliary body, Iris(Malignant,benign), Metastases Retinoblastoma	4	75	25	13	A3	11	11
4-Orbit, lacrimal : Thyroid ophthalmopathy , Pseudotumour , Granuloma Tumours: lymphoid, vascular, muscular, lacrimal gland.	4	75	25	13	A4	11	11
5- pathology of glaucoma (pseudoexfoliation, paediatric glaucoma, open angle glaucoma)	4	75	25	13	A5	11	11
6- Lens: Congenital Cataract , Intra Ocular Lens implantation.	4	75	25	13	A6	11	11
7-Retina : Haemorrhage, exudates, Retinal artery occlusion , Retinal vein occlusion, Retinopathies, Retinal pigment, degeneration , Retinal detachment	6	75	25	20	A7	14	14
Total	30			100%	-	80	80

Course Specifications of Surgical Ophthalmology in Master degree

University: Minia

Faculty: Medicine

Department: Surgical ophthalmology

<table>
<tr><td colspan="3">H. Course Information</td></tr>
<tr><td>• Academic Year/level: second part</td><td>a)
• Course Title: surgical ophthalmology</td><td>• Code: OO200</td></tr>
<tr><td colspan="3">• Number of teaching hours:
- Lectures: 1 hours/week, total 10
- Practical/clinical: 2 hours/week total 20</td></tr>
<tr><td>Overall Aims of the course</td><td colspan="2">By the end of the course the student must be able to:

The student should acquire the basic Knowledge and surgical skills necessary for ophthalmological Surgery in clinical reasoning, diagnosis and management of diseases including multiple injured patients.</td></tr>
<tr><td colspan="3">Intended learning outcomes of course (ILOs):
Upon completion of the course, the student should be able to:</td></tr>
<tr><td>A.Knowledge and Understanding</td><td colspan="2">a1. Recognize the diseases affecting the eye that needs surgical interference.
a2. Understand the variable surgical technique for each ocular disease.
a3. Recognize and train to use the basic ophthalmic surgical instruments machines microscope in wet labs.
a4. Recognize the possible surgical wards hazards and the preventive precautions and measures to avoid or deal with them.
a5. Recognize and apply the proper infection control measures in the surgical wards.
a6. Identify the possible or post operative surgical complications and the preventive precautions and measures to avoid or deal with them. Dacrocystectomy</td></tr>
</table>

	a7. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to ophthalmological Surgery. **a8.** Mention the basic ethical and medicolegal principles revenant to the ophthalmological Surgery. **a9.** Mention the basics of quality assurance to ensure good clinical care in ophthalmological Surgery. **a10.** Mention the ethical and scientific principles of medical research
B.Intellectual Skills	**b1.** compare competency in basic surgical skills **b2.** Relate the proper surgical plan for every case. **b3.** Decide making for difficult situation. **b4.** master proper and confident dealing with intra or post operative complications.
C.Professional and Practical Skills	C1. Practice at least 200 cataract cases (extra capsular extraction and phacoemulsification) C2. Practice 20 glaucoma procedures including YAG iridotomies and laser surgery C3. Practice at least 20 muscle surgeries C4. Repair of ocular trauma (lid, conjunctival) C5.Relate knowledge with adnexal surgeries (entropion and ectropion) performance and assistance C6. Perform Lacrimal intubation C7 practice in 20 vitrectomy/buckle C8 perform Ptosis surgery (assistance and performance of sling operation) C9 Evaluate keratoplasty (penetrating and lamellar) C10 performing minor procedures like lid lump removal and chalazion curettage and incision C11. Practice non invasive/invasive diagnostic procedure Basal laboratory investigation. and MRI orbit and interpret them C12 diagnose and treat ophthalmic emergencies

	(endophthalmitis, chemical burn, retinal vascular occlusion)
D.General and transferable Skills	d1. Perform practice-based improvement activities using a systematic methodology (audit, logbook) d2. Appraises evidence from scientific studies (journal club) d3. Conduct epidemiological Studies and surveys d4. Perform data management including data entry and analysis. d5. Facilitate learning of junior students and other health care professionals.

I. Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
1- Sterilization - Aneasthesia.	2	1	3
2- Eyelids: Excision & Reconstruction (grafts). Correction of ptosis, lagophthalmos, Entropion, Ectropion, lashdisorders. Lid margin: canthotomy, cantholysis, canthoplasty, tarsorrhaphy	2	1	3
3- Cornea: Keratectomy- Keratoplasty	2	1	3
4- Lacrimal Drainage System : Dacryo cystectomy –Dacryo cysto rhinostomy – Intubation	2	1	3
5- Lens extraction (ECCE, Phacoemulsification) , intra ocular lens. Implantation	2	1	3
6- Glaucoma (filtering operations)	2	1	3

7- trauma (conjunctival wounds, corneal lacerations, chemical injuries, foreign bodies)	2	1	3
J. Teaching and Learning Methods	• Didactic (lectures, seminars, tutorial) • Clinical rounds • Perform under supervision of senior staff • Simulations • Case presentation • Seminar • journal club		
K. Teaching and Learning Methods for students with limited Capacity	• Extra didactic lectures according to their needs • Simulations		
L. **Student Assessment**			
G. Student Assessment Methods	1-paper based examination to asses knowledge & understanding. 2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook		
H. Assessment Schedule (Timing of Each Method of Assessment)	-Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook		
I. Weighting of Each Method of Assessment	paper based exams 100, oral exams 50, practical exams 100		
M. List of References			
• **Course Notes/handouts**	• Staff members print out of lectures and/or CD copies		

• **Essential Books**	• The Basic and Clinical Science Course of the American Academy of Ophthalmolog 2022.
• **Recommended Text Books**	• Spaeth, G. L., Danesh-Meyer, H., Goldberg, I., & Kampik, A. (2011). *Ophthalmic Surgery: Principles and Practice E-Book*. Elsevier Health Sciences.
• **Periodicals, websites**	http.rcoph.org.uk

Course Coordinator/s:

Oculoplasty surgery:

Dr Raafat Mohyeldeen Abdelrahman Abdallah
Dr Mohamed Farag Khalil Ismail

Posterior segment surgery:

Dr Mohamed Farouk Sayed Othman
Dr Ahmed Shawkat Mohamed Abdelhalim
Dr Mohamed Abdelhamid Aboelhassan

Paediatric Ophthalmic surgery:

Prof. Mahmoud Gnaidy
A.Prof Ismail Moftah
Dr. Doaa Gamal Elfadaly

Squint surgery:

Dr Sahar Torkey Abdelrazik Abdelaziz
Dr Doaa Gamal Elfadaly

Head of Department:
Prof. Dr. Ahmed Mohamed kamla elshafie

Date of <u>last update</u> & approval by department Council: 06 /03 /2023

نموذج رقم (١١أ)

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: طب وجراحة العين.....

مسمى المقرر	الدوره الخاصه بتدريس ماده جراحة العين لطلاب درجه الماجستير
كود المقرر	OO200

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
		A	B	C	D
1- Sterilization - Aneasthesia.		A1-A10	B1-B4	C1-C12	D1-D5

2- Eyelids: Excision & Reconstruction (grafts). Correction of ptosis, lagophthalmos, Entropion, Ectropion, lashdisorders. Lid margin: canthotomy, cantholysis, canthoplasty, tarsorrhaphy		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**
3- Cornea: Keratectomy- Keratoplasty		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**
4- Lacrimal Drainage System : Dacryo cystectomy –Dacryo cysto rhinostomy – Intubation		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**
5- Lens extraction (ECCE, Phacoemulsification) , intra ocular lens. implantation		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**

6- Glaucoma (filtering operations)		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**
7- trauma (conjunctival wounds, corneal lacerations, chemical injuries, foreign bodies)		**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A	B	C	D
Lecture	A1-A10	B1-B4		
Clinical (Including grand rounds)			C1-C12	D1-D5
Presentation/seminar	A1-A10	B1-B4	C1-C12	D1-D5
Journal club	A1-A10	B1-B4	C1-C12	D1-D5
Thesis discussion	A1-A10	B1-B4	C1-C12	D1-D5

Training courses & workshops	**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**

C. **Matrix of Coverage of Course ILOs by Methods of Assessment**

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Paper based exam	**A1-A10**	**B1-B4**		
CIVA exam			**C1-C12**	
OSCE exam			**C1-C12**	
Oral Exam	**A1-A10**	**B1-B4**		
Assignment	**A1-A10**	**B1-B4**	**C1-C12**	**D1-D5**

Blueprint of ophthalmic surgery for Ophthalmology MSc degree

Postgraduate ophthalmic surgery Course for Master's degree (2nd part) of Ophthalmology Department (Code: OO 200) (250 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1- Sterilization - Aneasthesia.	4	75	25	13.3	A1	14	14
2- Eyelids: Excision & Reconstruction (grafts). Correction of ptosis, lagophthalmos, Entropion, Ectropion, lashdisorders. Lid margin: canthotomy, cantholysis, canthoplasty, tarsorrhaphy	4	75	25	13.3	A2	14	14
3- Cornea: Keratectomy-Keratoplasty	4	75	25	13.3	A3	14	14
4- Lacrimal Drainage System : Dacryo cystectomy –Dacryo cysto rhinostomy – Intubation	4	75	25	13.3	A4	14	14
5- Lens extraction (ECCE, Phacoemulsification) , intra ocular lens. implantation	4	75	25	13.3	A5	14	14
6- Glaucoma (filtering operations)	4	75	25	13.3	A6	14	14
7- trauma (conjunctival wounds, corneal lacerations, chemical injuries, foreign bodies)	6	75	25	20	A7	16	16
Total	30			100%	-	100	100

Course Specifications of Ophthalmic medicine in Master degree

University: Minia

Faculty: Medicine

Department: Ophthalmology

1-Course Information		
• **Academic Year/level:** second part	**b)** • **Course Title:** Medical *ophthalmology*	• **Code**: OO 200
• **Number of teaching hours:** - **Lectures: 2** hours/week - **Practical/clinical:**; 2 hours/week, total 30 hours		
2-Overall Aims of the course	*By the end of the course the student must be able to:* 1-To enable candidates to Acquire satisfactory level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of ophthalmology and enabling the candidates of making appropriate referrals to a sub-specialist **2-** To introduce candidates to the basics of scientific medical research **3-** 3- The broad aim of the course is to educate students about Ophthalmic Medicine also to provide the students with updated data and researches.	
3-Intended learning outcomes of course (ILOs) ***Upon completion of the course, the student should be able to:***		
A.Knowledge and Understanding	A1 Recognize clinical diagnosis of diseases affecting the eye and the adenexa. A2 Investigate tools necessary for the diagnosis of ophthalmic diseases.	

	A3 Identify surgical skills for basic ophthalmic procedures. A4 Recognize medical emergencies and critical care in ophthalmology. A5 List neurologic and ophthalmology related disorders. A6 List ocular manifestation of systemic diseases.
B. Intellectual Skills	B1. Specify medical dilemmas and complexities and how to solve them. B2 Conclude and be able to conduct scientific discussion. B3 Relate different choices based on multiple determining factors as social, scientific, economic etc... B4 Prioritize and tailor the different guidelines to individual situations. B5 Decide ideal management of medical and surgical emergency states. B6 Relate the surgical skills and performance to the state of the art.
c. Professional and Practical Skills	C1.Take a focused medical history with proper analysis and conclusions. C2 Examine properly and systematically the eye and the adenexa with an exact follow of the standard rules and interpret signs individually. C3 Integrate data from the history and the examination done C4 Ask for the proper investigations to be done for a given medical problem. C5 Put a diagnosis and differential diagnosis of different cases. C6 Write a treatment prescription for a given medical problem within a multidisciplinary management plan if needed.

	C7 Identify patients needing hospitalization, and those needing surgical intervention.
d.General and transferable Skills	D1. Facilitate learning of junior students and other health care professionals including their evaluation and assessment.

4-Course Contents

Topic	Lecture hours/week	Practical/Clinical hours/week	Total No. of hours hours/week
1. Diseases of Eyelids : Blepharitis, allergy- lid retraction- MadarosisBlepharospasm- Infections	1.5	1	2.5
2. Diseases of lacrimal appararus: Dacryoadenitis- Dacryocystitiscanaliculitis	1.5	1	2.5
3. Diseases of Cornea: Keratitis (Bacterial, Viral, Mycotic)- Pigmentations, PrecipitatesPeripheral corneal disordersDegeneration- Dystrophies- Ectasia	1.5	1	2.5
4. lens diseases (cataract, sublaxation)	1.5	1	2.5
5. Disease of Uvea: Uveitis (Infective, Non-infective, Chrornic)	1.5	1	2.5
6. Diseases of Retina: Dystrophies (Receptors, Retinal pigment epithelium & Choroidal) Degenerations Vascular: Retinopathies (Diabetic, Hypertensive, Renal, Toxaemia, Arteriosclerotic), retinal artery occlusion & retinal vein occlusio	1.5	1	2.5
7. Diseases of Conjunctiva: Conjunctivitis (Bacterial, Viral, Chlamydial, allergic)- Mucocutaneous disorders- Dry eye	1.5	1	2.5
8. Diseases of Sclera: ScleritisEpiscleritis.	1.5	1	2.5

9. Glaucomas: Ocular hypertensionPrimary Open angle glaucoma – Normo tensive glaucoma, Primary angle closure glaucoma – secondary Open angle glaucoma, secondary angle closure glaucoma, Infantile & Juvenile	1.5	1	2.5
10. Diseases of optic nerve: Neuropathy, Neuritis, Papilledema, congenital.	1.5	1	2.5
11. Neuro-ophthalmology: Pupillaryanomalies,Nystagmus,ophtha l moplegias, Migraine, Brain stem syndromes, optic atrophy- chiasmal lesions.	1.5	1	2.5
12. Medical ophthalmology: Metabolic (Diabetes- Gout)- HypovitaminosisEndocrinal (Pituitary- ThyroidParathyroid- Thymus)- Blood diseases- Collagen diseases (systemic luysus erythematous – rheumatic arthritis - Gaint cell arthritis)- Chronic granulomatous diseases (Tuberculosis , syphilis, Leprosy & Sarcoidosis) - Phacomatoses- Musculer diseases.	1.5	1	2.5
Ocular tumors			
J. Teaching and Learning Methods	K. Didactic (lectures, seminars, tutorial) Clinical rounds Perform under supervision of senior staff Simulations Case presentation Seminar journal club		
L. Teaching and Learning Methods for students with limited Capacity	Extra didactic lectures according to their needs Simulations		
M. Student Assessment Methods	paper based examination to asses knowledge & understanding.		

	2-Oral examination to asses knowledge & understanding & attitude. 3-Logbook
N. Assessment Schedule (Timing of Each Method of Assessment)	Assesment 1: paper based examination at the 25th week 2-Assessment 2: oral examination at the 25th week 3-Logbook
O. Weighting of Each Method of Assessment	paper based exams 100, oral exams 60, practical exams 100
8-List of References	
• **Course Notes/handouts**	• Staff members print out of lectures and/or CD copies
• **Essential Books**	Yanoff, M., & Duker, J. S. (2018). *Ophthalmology E-Book*. Elsevier Health Sciences. *Basic science and clinical course, American academy ophthalmology 2022*
• **Recommended Text Books**	Kanski, J. J., & Bowling, B. (2015). *Kanski's clinical ophthalmology e-book: a systematic approach*. Elsevier Health Sciences.
• **Periodicals, websites**	www.AAO.org

Course Coordinator/s:

Dr Ahmed Mohamed Sabrey

Dr Heba Radi AttaAllah Atta

Head of Department:

Prof. Dr. Ahmed Mohamed kamal elshafie

Date of last update & approval by department Council: 6/3/2023

نموذج رقم (١١أ)

مسمى المقرر	الدوره الخاصه بتدريس ماده طب العيون لطلاب درجه الماجستير
كود المقرر	OO 200 master

جامعة/أكاديمية : .....المنيا.....
كلية / معهد: .....الطب البشرى.....
قسم: .....طب وجراحة العين.....

A. Matrix of Coverage of Course ILOs By Contents

Contents (List of course topics)	Week No.	Intended Learning Outcomes (ILOs)			
		A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
		A	**B**	**C**	**D**
1. Diseases of Eyelids : Blepharitis, allergy-lid retraction-MadarosisBlepharospasm- Infections		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
Diseases of lacrimal appararus: Dacryoadenitis-Dacryocystitiscanaliculitis		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
Diseases of Cornea: Keratitis (Bacterial, Viral, Mycotic)-Pigmentations, PrecipitatesPeripheral corneal disordersDegeneration - Dystrophies- Ectasia		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
lens diseases (cataract, sublaxation)		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
Disease of Uvea: Uveitis (Infective,		**A1-A6**	**B1-B6**	**C1-C7**	**D1**

Non-infective, Chrornic)					
Diseases of Retina: Dystrophies (Receptors, Retinal pigment epithelium & Choroidal) Degenerations Vascular: Retinopathies (Diabetic, Hypertensive, Renal, Toxaemia, Arteriosclerotic), retinal artery occlusion & retinal vein occlusio		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
Diseases of Conjunctiva: Conjunctivitis (Bacterial, Viral, Chlamydial, allergic)- Mucocutaneous disorders- Dry eye		**A1-A6**	**B1-B6**	**C1-C7**	**D1**
Diseases of Sclera: ScleritisEpiscleritis.		**A1-A6**	**B1-B6**	**C1-C7**	**D1**

B. Matrix of Coverage of Course ILOs by Methods of Teaching & Learning

Methods of Teaching & Learning	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical skills	D. General & Transferable Skills
	A		C	D
Lecture	A1-A6	B1-B6		
Clinical (Including grand rounds)			C1-C7	
Presentation/seminar	A1-A6	B1-B6	C1-C7	D1
Journal club	A1-A6	B1-B6	C1-C7	D1
Thesis discussion	A1-A6	B1-B6	C1-C7	D1
Training courses & workshops	A1-A6	B1-B6	C1-C7	D1

C. **Matrix of Coverage of Course ILOs by Methods of Assessment**

Methods of Assessment	Intended Learning Outcomes (ILOs)			
	A. Knowledge & Understanding	**B. Intellectual Skills**	**C. Professional & Practical skills**	**D. General & Transferable Skills**
	A	**B**	**C**	**D**
Paper based exam	**A1-A6**	**B1-B6**		
CIVA exam			**C1-C7**	
OSCE exam			**C1-C7**	
Oral Exam	**A1-A6**	**B1-B6**		
Assignment	**A1-A6**	**B1-B6**	**C1-C7**	

Blueprint of Ophthalmic medicine for Ophthalmology MSc degree

Postgraduate OPhthamlic medicine Course for Master's degree (2st part) of Ophthalmology Department (Code: OO 200) (260 marks)

Topic	Hours	Knowledge %	Intellectual%	Weight %	ILOs	Total Marks	Actual Mark
1. Diseases of Eyelids : Blepharitis, allergy- lid retraction- MadarosisBlepharospasm- Infections	2.5	75	25	8.3	A1	8	8
Diseases of lacrimal appararus: Dacryoadenitis- Dacryocystitiscanaliculitis	2.5	75	25	8.3	A2	8	8
Diseases of Cornea: Keratitis (Bacterial, Viral, Mycotic)- Pigmentations, PrecipitatesPeripheral corneal disordersDegeneration- Dystrophies- Ectasia	2.5	75	25	8.3	A3	8	8
lens diseases (cataract, sublaxation)	2.5	75	25	8.3	A4	8.5	8.5
Disease of Uvea: Uveitis (Infective, Non-infective, Chrornic)	2.5	75	25	8.3	A5	8.5	8.5
Diseases of Retina: Dystrophies (Receptors, Retinal pigment epithelium & Choroidal) Degenerations Vascular: Retinopathies (Diabetic, Hypertensive, Renal, Toxaemia, Arteriosclerotic), retinal artery occlusion & retinal vein occlusio	2.5			8.3		8.5	8.5
Diseases of Conjunctiva: Conjunctivitis (Bacterial, Viral, Chlamydial, allergic)- Mucocutaneous disorders- Dry eye	2.5			8.3		8	8
Diseases of Sclera: ScleritisEpiscleritis.	2.5			8.3		8.5	8.5
Glaucomas: Ocular hypertensionPrimary Open angle glaucoma – Normo tensive glaucoma, Primary angle closure glaucoma – secondary Open angle glaucoma, secondary angle closure glaucoma, Infantile & Juvenile	2.5			8.3		8.5	8.5
Diseases of optic nerve: Neuropathy, Neuritis, Papilledema, congenital.	2.5			8.3		8.5	8.5
Neuro-ophthalmology: Pupillaryanomalies,Nystagmus,ophtha l	2.5	75	25	8.3	A6	8.5	8.5

moplegias, Migraine, Brain stem syndromes, optic atrophy- chiasmal lesions.							
Medical ophthalmology: Metabolic (Diabetes-Gout)- HypovitaminosisEndocrinal (Pituitary-ThyroidParathyroid- Thymus)- Blood diseases- Collagen diseases (systemic luysus erythematous – rheumatic arthritis - Gaint cell arthritis)- Chronic granulomatous diseases (Tuberculosis , syphilis, Leprosy & Sarcoidosis) - Phacomatoses- Musculer diseases.	2.5	75	25	8.3	A7	8.5	8.5
Total	30			100%	-	100	100

كلية الطب

Faculty of Medicine