



كلية الطب

Faculty of Medicine



Program Specifications of Ophthalmology Medical Doctorate (MD) Degree (2023)

Program Specifications for MD of Ophthalmology
(2022/2023)

University: Minia

Faculty: Medicine

Department: Ophthalmology

Code: OO 100

A- Basic Information:

- 1. Program title:** MD Ophthalmology
- 2. Final award:** Doctorate (MD) in Ophthalmology
- 3. Program type:** single double multiple
- 4. Responsible department:** Ophthalmology department
- 5. Departments involved:** Ophthalmology department, Public health and community medicine department
- 6. Program duration:** 3.5 years
- 7. Coordinator:** Prof. Dr. Ahmed El-shafie
- 8. External evaluators:** Prof. Dr. Mahmoud Abdel-Badei
- 9. Internal evaluator:** Prof. Dr Mohamed Farouk
- 10. Program management team:** all staff members of ophthalmology department

B- Professional Information:

1-Program aims:

Graduate of Medical doctorate in Ophthalmology the candidate should be able to:

- 1. Plan to improve performance in the field of Ophthalmology**
- 2. Acquire skills to solve critical problems**
- 3. Analyze reading of research an issues and issues related to Ophthalmology**
- 4. Follow proper research methodology.**

2- Intended learning outcomes (ILOs)

2.1. (a) Knowledge and understanding:

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

- A1. Identify basic, biomedical, clinical, epidemiological, and behavioural sciences related conditions, problem and topic
- A.2. Identify basics, tools and ethics of scientific medical, clinical research.
- A.3. Discuss ethical and medicolegal Principles relevant to practice in the Ophthalmology field.
- A.4. Explain principles measurements of quality assurance and quality improvement in medical education and in clinical practice of Ophthalmology.
- a.6. Identify surgical skills for basic ophthalmic procedures including (cataract and glaucoma surgeries, strabismus surgery, minor ophthalmic procedures).
- A.7. Define post-operative complications, specially post-operative endophthalmitis and provide first aid treatment in such conditions.

2.2. (b)Intellectual skills

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

- b1. Specify medical dilemmas and complexities and how to solve them.
- b2. Conclude decisions 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, 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 between different emergency conditions in ophthalmology and manage them with ideal problem-solving skills.

B7. Refine the surgical skills and performance to the state of the art.

b.8. Analyze and interpret any morphological abnormalities for both eyes and other systems to find a research project.

b.9. Analyze different research papers and choose best technique, microscopy and statistical & computer programs to interpret results.

b.10. Compute research studies.

b.11. Apply safety measures during professional practicing in different ophthalmic surgery.

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.

b.14. Compare between different decisions in various ophthalmic subspecialties.

b.15. Encourage intellectual curiosity of young ophthalmologists necessary for scientific discovery and innovation through active participation in research.

b.16. Estimate the meaning of Evidence-based medicine and its importance

2.3. Skills:

2.3.1. (c)Professional and practical skills

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

- c1. Perform all basic and some of the advanced professional skills in Ophthalmology.
- 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. Train to write and evaluate professional ophthalmological reports.
- C6. Write a treatment prescription for a given medical problem within a multidisciplinary management plan if needed.
- C7. Select patients needing hospitalization, and those needing surgical intervention.
- c.8 Analyze the collected data using different types of statistical programs as SPSS program.
- C9. Train on using of all available technological means to serve Professional practice
- C10. Cooperate with colleagues to plan to elevate professional practice and improve of the medical and surgical performance

2.3.2. (d)General and transferable skills

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

- D.1. Facilitate efficient communication skills using all sorts.
- D2. Use information technology to improve professional practice.
- D.3. Facilitate methods of teaching and evaluating others.

D.4. Interpret data of skills of self-evaluation and identification of personal learning needs.

D.5. Analyze Skills of self-assessment and continuous learning.

D.6. Use different information resources (books, online, ...) to sustain knowledge.

D.6. Put roles and indicators for team performance evaluation and appraisal.

D.7. Plan how team will learn and perform together

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 with perfect time management

3- Program Academic Reference Standards

- Minia faculty of medicine 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 session NO.177 Dated 18/5/2009) {**Annex 1**}.
- Minia faculty of medicine has developed the academic standards (ARS) for Medical Doctorate (MD) program and was approved in faculty Council decree No.7528, in its session No.191, dated: 15-3-2010), last update: 20-2-2023 {Annex I}.
- Then, Ophthalmology department has developed the intended learning outcomes (ILOs) for doctorate (MD) program in Ophthalmology and the Date of program specifications first approval was by department council: 13-5-2013, last update: 5-3-2023{Annex 2}

5. Program Structure and Contents:

5. A. Program duration: (≥ 3.5 years).

| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours/week |
|--|--------------------|-------------------------------|-------------------------|
| First part (6 months, 24 weeks) | | | |
| Physiology | 2 | 1 | 3 |
| Pathology | 2 | 1 | 3 |
| Anatomy | 2 | 1 | 3 |
| Optics | 2 | 1 | 3 |
| Medical Statistics and Research Methodology | 1 | 1 | 2 |
| Use of Computer in Medicine | 1 | 1 | 2 |
| Total/week | 9 | 5 | 14 |
| Total hours for first part | 216 hours | 120 hours | 336 hours |
| Second part (2 Academic Years, 60 Weeks) | | | |
| Medical Ophthalmology | 4 | 5 | 9 |
| Surgical Ophthalmology | 4 | 5 | 9 |
| Total hours/second part | 480 | 600 | 1080 |
| Third Part (18 months) | | | |
| Research Thesis and discussion | continuous. | | |

5. D. Program courses:

| Course Title | | Total No. of Hours | No. of hours /week | | |
|-------------------------------|-------|--------------------|--------------------|-----------|----------|
| | | | Lect. | Practical | tutorial |
| FIRST PART (Level of course): | | | | | |
| 1. Anatomy | OO100 | 72 | 2 | 1 | |
| 2. physiology | OO100 | 72 | 2 | 1 | |

| | | | | | |
|---|--------------------|-----|---|---|--|
| 3. Optics | OO100 | 72 | 2 | 1 | |
| 4. Pathology | OO100 | 72 | 2 | 1 | |
| 5. Research design & methodology: | OO100 | 45 | 2 | 1 | |
| 6. Uses of computer in medicine: | OO100 | 30 | 2 | 1 | |
| Training programs and workshops, field visits, seminars & other scientific activities | Continuous | | | | |
| SECOND PART (Level of course): | Code No. of course | | | | |
| 7. Medical Ophthalmology | OO100 | 540 | 4 | 5 | |
| 8. Surgical ophthalmology. | OO100 | 540 | 4 | 5 | |
| Training programs and workshops, field visits, seminars & other scientific activities | CONTINUOUS | | | | |
| <u>THIRD PART (18 months):</u> Research (thesis) and discussion | CONTINUOUS | | | | |

6- Program admission requirements:

1. General requirements:

A. Candidates should have one of the following:

- MBChB degree from any Egyptian faculty of Medicine or
- Equivalent degree from medical schools abroad approved by the Ministry of higher education.

B. Master's degree in Ophthalmology.

C. Follows postgraduate regulatory rules of postgraduate studies of Faculty of Medicine, Minia University.

2. Specific requirements:

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

B. Master degree in Ophthalmology with at least " Good Rank".

7- Regulations for progression and program completion:

Duration of program is (Minimum 3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part (≥6 months):

- All courses as specified in the internal bylaw
- At least six months after registration should pass before enrolling for the first part examination.
- The exam is set twice a year in April and in October.
- For the student to pass the first part exam, a score of at least 60% in each curriculum is needed.
- Those who fail in one curriculum need to re-exam it only.

Second Part: (≥24 months):

- Program related specialized Courses.
- Actual work for 36 months as a demonstrator /trainee in the department of Ophthalmology.
- The student should pass the 1st part before asking for examination in the 2nd part.
- Two sets of exams: 1st in April 2nd in October.

- 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).
- 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:
 - a. Training courses
 - b. Grand rounds
 - c. Case presentation
 - d. Seminars
 - e. Thesis discussion
 - f. Workshops
 - g. Conference attendance
 - h. Journal club
 - i. Other scientific activities requested by the department

Thesis/essay: (2-4 years from the date of enrolment):

- Candidate can start working on the thesis after enrolment.
- It is obligatory to complete the thesis and to get it approved after passing the second part final examination and after a minimum of 24 months following official registration of the thesis protocol.
- For approval of the thesis, it is obligatory to get 2 research papers published out of the thesis with at least one published in international journal (listed in WOS or/and Scopus, cite score ≥ 0.5 , have ISSN).
- Thesis discussion with approval is enough to pass this part.
- The maximum duration for completion and approval of thesis is 4 years. Extension for a maximum of 8 years is allowed under certain conditions but this is subjected to the approvals of the supervisors, the dean and the university president.

8. Teaching and learning methods:

| Teaching and learning methods | The ILOs |
|---|---|
| Lectures | a1,a2, a3,a4,a6,a7 b1,b2,b3,b4,b5,b6,b8,b9,10,11,13,14,15,16 |
| Practical sessions Case based discussions | c1,c2, c3,4,5,6,7,8,9,10 |
| Self-training activities seminars, presentations and assignments. Training courses & workshops. Thesis discussion. Conference attendance | a1-a5, d1,d2,d3,d4,d5,d6,d7,d8 |

9-Methods of student assessment:

| Method of assessment | The assessed ILOs |
|---|---|
| 1. Research (Thesis) | a1,a2, a3,a4,a5,a6,a7 b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16 c1, c2, c2,c3,c4,c5,c6,c7,c8,c9,c10 d1, d2, d3,d4,d5,d6,d7,d8 |
| 2. Paper based Exams: ● Short essay | a1,a2, a3,a4,a5,a6,a7 b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16 |
| 3. OSCE- CIVA (clinical image and video assessment) | a1,a2, a3,a4,a5,a6,a7 b1,b2,b3, c1, c2, 3,4,5,6,7,8,9,10, d1, d2, d3, d5, d6, d7,d8 |
| 4. Seminars, presentations, assignments | a1,a2, a3,a4,a5,a6 b1,b2,b3, c1, c2, d1, d2, d3, d4,d5,d6,d7,d8 |
| 5. Oral Exams | a1,a2, a3,a4,a5,a6,a7 b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16 |

10. Weighting of assessment:

| Course | Written | Oral | Practical |
|---|---------|------|-----------|
| Anatomy | 100 | 100 | |
| Physiology | 100 | 100 | |
| Optics | 100 | 100 | |
| Ophthalmic Pathology | 100 | 100 | |
| Medical Statistics and Research Methodology | 100 | 100 | 100 |
| Use of Computer in Medicine | 100 | 100 | 100 |
| Ophthalmic medicine | 100 | 50 | 100 |
| Ophthalmic surgery | 100 | 50 | 100 |

11. Methods of Program Evaluation:

| Evaluator | Method/tool | Sample |
|--|---------------------------|------------------|
| 1. Senior students (Students of last year) | Questionnaires | All students |
| 2. Graduates (Alumni) | Questionnaires | At least 10 |
| 3. Stakeholders | Meeting Questionnaires | 10 |
| 4. External & Internal evaluators and external examiners | Reports | 1 |
| 5. Quality Assurance Unit | Reports Questionnaires | |
| 6. Exam results | Results analysis reports | All the students |

Program coordinators:

Prof Dr Ahmed Mohamed Kamal Elshafie
Prof Dr Mahmoud Mohamed Genidy
Dr Mohamed Esmail Khalil

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

Head of Department:

- **Prof Dr Ahmed Mohamed Kamal Elshafie**

Annex (1): Comparison between General Academic Reference Standards (GARS) and Faculty Academic Reference Standards (ARS)

| برامج الدكتوراه NAQAEE | Faculty Doctorate (MD) Program |
|---|---|
| 1. مواصفات الخريج: خريج برنامج الدكتوراه في أي تخصص يجب أن يكون قادرا على: | 1. Graduate attributes: Graduate of doctorate (MD) program in any specialty should be able to: |
| ١,١. إتقان أساسيات ومنهجيات البحث العلمي. | 1.1. Mastery of basic research skills and types of study design. |
| ٢,١. العمل المستمر علي الإضافة للمعارف في مجال التخصص. | 1.2. Contribute to development, application, and translation of new medical knowledge in his scholarly field through research. |
| ٣,١. تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص والمجالات ذات العلاقة. | 1.3. use analytical and critical skills in observing, collecting and interpreting data. |
| ٤,١. دمج المعارف المتخصصة مع المعارف ذات العلاقة مستتبطا ومطورا للعلاقات البينية بينها. | 1.4. Integrate biomedical sciences with clinical information to explore scientific basis of medical practice for improvement of management of diseases. |
| ٥,١. إظهار وعيا عميقا بالمشاكل الجارية والنظريات الحديثة في مجال التخصص. | 1.5. Demonstrate an awareness of current health problems and recent theories in his scholarly field |

| | |
|---|--|
| ٦,١. تحديد المشكلات المهنية و إيجاد حلولاً مبتكرة لحلها. | 1.6. Identify and create solutions for occupational problems and medical malpractice conditions. |
| ٧,١. إتقان نطاقاً واسعاً من المهارات المهنية في مجال التخصص | 1.7. perform a wide range of professional skills in his scholarly field. |

| | |
|---|--|
| ٨,١. التوجه نحو تطوير طرق و أدوات و أساليب جديدة للمزاولة المهنية. | 1.8. Develop and improve new methods and approaches in the professional medical practice of the specific field. |
| ٩,١. استخدام الوسائل التكنولوجية المناسبة بما يخدم ممارسته المهنية | 1.9. Use information technology to improve his professional medical practice including online medical information manage information and researches. |
| ١٠,١. التواصل بفاعلية وقيادة فريق عمل في سياقات مهنية مختلفة. | 1.10. communicate effectively as a member or leader of health care group or other professional group and gain leadership skills. |
| ١١,١. اتخاذ القرار في ظل المعلومات المتاحة. | 1.11. Make informed decisions based on available data (e.g. patient information, up to date scientific evidence and clinical judgement). |
| ١٢,١. توظيف الموارد المتاحة بكفاءة وتنميتها والعمل على إيجاد موارد جديدة. | 1.12. Effective management, development & improvement of available resources and have the competency to get new resources. |
| ١٣,١. الوعي بدوره في تنمية المجتمع و الحفاظ على البيئة. | 1.13. Be aware of his community needs related to his field and have the ability to improve & maintain health care and carryout system-based improvement. |

| | |
|---|--|
| ١٤,١. التصرف ب ما يعكس الالتزام بالنزاهة والمصداقية وقواعد المهنة . | 1.14. Demonstrate ethical behavior, moral reasoning, honesty, integrity, dependability, and commitment to service and health equity. |
| ١٥,١. الالتزام بالتنمية الذاتية المستمرة ونقل علمه و خبراته للآخرين . | 1.15. Critically reflect on one's own performance to set learning and improving goals and sharing his knowledge. |

| | |
|---|--|
| 2. المعايير القياسية العامة: NAQAAE General Academic Reference Standards "GARS" for MD Programs | 2. Faculty Academic Reference Standards (ARS) for MD Program |
| 2.1. المعرفة والفهم : بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا علي الفهم والدراسة بكل من : | 2.1. Knowledge and understanding: Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of: |
| ١,٢,١. النظريات والأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة | 2.1.1. Theories, basics and updated knowledge in his scholarly field and related basic sciences. |
| ٢,١,٢. أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة | 2.1.2. Basic, methods and ethics of medical research. |
| ٣,١,٢. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص | 2.1. 3. Ethical and medicolegal principles of medical practice. |

| | |
|---|---|
| ٢,١,٤. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص | 2.1. 4. Identify Principles and fundamental of quality in professional medical practice. |
| ٢,١,٥. المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها | 2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health. |
| 2.2. المهارات الذهنية : بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على: | 2.2. Intellectual skills: Upon completion of the doctorate program (MD), the graduate must be able to: |

| | |
|--|--|
| ٢,٢,١. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها | 2.2.1 Analysis and evaluation of information to correlate and deduce from it. |
| ٢,٢,٢. حل المشاكل المتخصصة استنادا على المعطيات المتاحة | 2.2.2. Problem solving skills based on analysis of available data for common health problems related to his scholarly field. |
| ٢,٢,٣. إجراء دراسات بحثية تضيف إلى المعارف | 2.2.3. Carryout research projects related to his scholarly field. |
| ٢,٢,٤. صياغة أوراق علمية | 2.2.4. Write and publish scientific papers. |
| ٢,٢,٥. تقييم المخاطر في الممارسات المهنية | 2.2.5. Assess risk in professional medical practice. |

| | |
|--|---|
| ٢,٢,٦. التخطيط لتطوير الأداء في مجال التخصص | 2.2.6. Establish goals, commitments and strategies for improved productivity and performance. |
| ٢,٢,٧. اتخاذ القرارات المهنية في سياقات مهنية مختلفة | 2.2.7. Making professional decisions in different professional contexts. |
| ٢,٢,٨. الابتكار/ الإبداع | 2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research. |
| ٢,٢,٩. الحوار والنقاش المبني على البراهين والأدلة | 2.2.9. Using Evidence-based strategies to during discussion or teaching others. |
| 2.3. مهارات المهنية : بانتهاؤ دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على : | 2.3. Professional skills: Upon completion of the doctorate program (MD), the graduate must be able to: |
| ٢,٣,١. إتقان المهارات المهنية الأساسية والحديث في مجال التخصص | 2.3.1. Master the basic as well as modern professional practical and/or clinical skills. |

| | |
|--|---|
| ٢,٢,٣. كتابة وتقييم التقارير المهنية | 2.3.2. Write and evaluate professional reports. |
| ٢,٣,٣. تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص | 2.3.3. Evaluate and improve the methods and tools in the specific field |
| ٢,٣,٤. استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية | 2.3.4. use of technological means to serve Professional practice |

| | |
|---|--|
| | |
| ٥,٣,٢. التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين. | 2.3.5. Planning for the development of professional practice and improve of the performance of others |
| 2.4. المهارات العامة والمنتقلة : بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا على : | 2.4. General and transferable skills Upon completion of the doctorate program (MD), the graduate must be able to: |
| ٢,٤,١. التواصل الفعال بأنواعه المختلفة | 2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the health care team, understanding the role of consultations and referrals. |
| ٢,٤,٢. استخدام تكنولوجيا المعلومات ب ما يخدم تطوير الممارسة المهنية | 2.4.2. Use of information technology to serve Professional Practice Development. |
| ٢,٤,٣. تعليم الآخرين وتقييم أداءهم | 2.4.3. Demonstrate effective teaching and evaluating others. |
| ٤,٢,٤. التقييم الذاتي والتعلم المستمر. | 2.4.4. Self-assessment and continuous learning. |
| ٢,٤,٥. استخدام المصادر المختلفة للحصول على المعلومات والمعارف. | 2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to address medical questions and knowledge to sustain professional growth |
| ٢,٤,٦. العمل في فريق وقيادة فرق العمل | 2.4.6. Work as a member in larger teams and as well as a team leader knows how to develop "teaming strategy" to plan how people will act and work together. |

| | |
|--|--|
| ٢,٤. ٧.. إدارة اللقاءات العلمية والقدرة علي إدارة الوقت | 2.4.7. Manage of scientific meetings and the ability to manage Time effectively. |
|--|--|

Annex [2] Matrix Between Faculty Academic Reference Standards (ARS), and Program ILOS for MD in Ophthalmology

| ٢.المعايير القياسية العامة: NAQAAE General Academic Reference Standards "GARS" for MD Programs | 2. Faculty Academic Reference Standards (ARS) for MD Program | MD Program of Ophthalmology |
|---|--|---|
| 2.1.المعرفة والفهم : بانتهاء دراسة برنامج الدكتوراه يجب أن يكون الخريج قادرا علي الفهم والدراسة بكل من : | 2.1. Knowledge and understanding: Upon completion of the doctorate Program (MD), the graduate should have sufficient knowledge and understanding of: | 2.1. Knowledge and Understanding Upon completion of the MD Program 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. Theories, basics and updated knowledge in his scholarly field and related basic sciences. | A1. Identify basic, biomedical, clinical, epidemiological, and behavioral sciences related conditions, problem and topic |

| | | |
|--|---|---|
| ٢,١,٢. أساسيات ومنهجيات وأخلاقيات البحث العلمي وأدواته المختلفة | 2.1.2. Basic, methods and ethics of medical research. | A.2. Identify basics, tools and ethics of scientific medical, clinical research. |
| ٢,١,٣. المبادئ الأخلاقية والقانونية للممارسة المهنية في مجال التخصص | 2.1. 3. Ethical and medicolegal principles of medical practice. | A.3. Discuss ethical and medicolegal Principles relevant to practice in the Ophthalmology field. |
| ٢,١,٤. مبادئ وأساسيات الجودة في الممارسة المهنية في مجال التخصص | 2.1. 4. Identify Principles and fundamental of quality in professional medical practice. | A.4. Explain principles measurements of quality assurance and quality improvement in medical education and in clinical practice of Ophthalmology. |
| ٢,١,٥. المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها | 2.1.5. Knowledge related to effects of professional practice on public health and methods of maintenance and system-based improvement of public health. | A.6. Identify surgical skills for basic ophthalmic procedures including (cataract and glaucoma surgeries, strabismus surgery, minor ophthalmic procedures). A.7. Define the post operative complications, specially post operative endophthalmitis and provide first aid treatment in such conditions. |
| 2.2. المهارات الذهنية: بانتهاء دراسة برنامج الدكتوراة يجب أن يكون الخريج قادرا على: | 2.2. Intellectual skills: Upon completion of the doctorate program (MD), the graduate must be able to: | 2.2. Intellectual skills: Upon completion of the MD program in Ophthalmology, the graduate must be able to: |
| ٢,٢,١. تحليل وتقييم المعلومات في مجال التخصص والقياس عليها والاستنباط منها | 2.2.1 Analysis and evaluation of information to correlate and deduce from it. | b1. Specify medical dilemmas and complexities and how to solve them. b2. Conclude decisions and conduct scientific discussion. |

| | | |
|---|--|---|
| | | <p>b3. Select from different choices based on multiple determining factors as social, scientific, economic etc...</p> <p>b4. Prioritize and tailor the different guidelines to individual situations, be aware of international guidelines like American Academy Ophthalmology and Royal College Guidelines.</p> <p>b5. Conduct ideal management of medical and surgical emergency states.</p> |
| ٢,٢,٢. حل المشاكل المتخصصة استنادا على المعطيات المتاحة | 2.2.2. Problem solving skills based on analysis of available data for common health problems related to his scholarly field. | <p>B6. Differentiate between different emergency conditions in ophthalmology and manage them with ideal problem solving skills.</p> <p>B7. Refine the surgical skills and performance to the state of the art.</p> |
| ٢,٢,٣. إجراء دراسات بحثية تضيف إلى المعارف | 2.2.3. Carryout research projects related to his scholarly field. | b.8. Analyze and interpret any morphological abnormalities for both eyes and other systems to find a research project. |
| ٢,٢,٤. صياغة أوراق علمية | 2.2.4. Write and publish scientific papers. | <p>b.9. Analyze different research papers and choose best technique, microscopy and statistical & computer programs to interpret results.</p> <p>b.10. Compute research studies.</p> |
| ٢,٢,٥. تقييم المخاطر في الممارسات المهنية | 2.2.5. Assess risk in professional medical practice. | b.11. Apply safety measures during professional practicing in different ophthalmic surgery. |
| ٢,٢,٦. التخطيط لتطوير الأداء في مجال التخصص | 2.2.6. Establish goals, commitments and strategies for improved productivity and performance. | 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. |
| ٢,٢,٧. اتخاذ القرارات المهنية في سياقات مهنية مختلفة | 2.2.7. Making professional decisions in different professional contexts. | b.14. Train on decision making in different ophthalmic subspecialties. |
| ٢,٢,٨. الابتكار/ الإبداع | 2.2.8. Demonstrate intellectual curiosity necessary for scientific discovery and innovation through active participation in research. | b.15. Encourage intellectual curiosity of young ophthalmologists necessary for scientific discovery and innovation through active participation in research. |
| ٢,٢,٩. الحوار والنقاش المبني على البراهين والأدلة | 2.2.9. Using Evidence-based strategies to during discussion or teaching others. | b.16. Estimate the Evidence-based medicine and its importance |
| 3.2.المهارات المهنية: بانتهاء دراسة برنامج الدكتوراة يجب أن يكون الخريج قادرا على: | 2.3. Professional skills: Upon completion of the doctorate program (MD), the graduate must be able to: | 2.3. (c) Professional and practical skills Upon completion of the MD program in Ophthalmology, the graduate must be able to: |
| ٢.3.1. إتقان المهارات المهنية الأساسية والحديثة في مجال التخصص | 2.3.1. Master the basic as well as modern professional practical and/or clinical skills. | C.1. Perform all basic and some of the advanced professional skills in Ophthalmology.. C.2.Examine properly and systematically the eye and the adenexa with an exact follow of the standard rules and interpret signs individually. C.3. Integrate data from the history and the examination done. C.4. Ask for the proper investigations to be done for a given medical problem. |
| ٢.٢,٣. كتابة وتقييم التقارير المهنية | 2.3.2. Write and evaluate professional reports. | C5. Train to write and evaluate professional ophthalmological reports. |

| | | |
|--|--|---|
| ٣,٣.٢. تقييم وتطوير الطرق والأدوات القائمة في مجال التخصص | 2.3.3. Evaluate and improve the methods and tools in the specific field | <p>C6. Write a treatment prescription for a given medical problem within a multidisciplinary management plan if needed.</p> <p>C7. Identify patients needing hospitalization, and those needing surgical intervention.</p> <p>C.8 Analyze the collected data using different types of statistical programs as SPSS program.</p> |
| ٤,٣,٢. استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية | 2.3.4. use of technological means to serve Professional practice | C.9. Train on using of all available technological means to serve Professional practice |
| ٢,٣,٥. التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين. | 2.3.5. Planning for the development of professional practice and improve of the performance of others | C.10. Cooperate with colleagues to plan to elevate professional practice and improve of the medical and surgical performance |
| 4.2. المهارات العامة والمنتقلة : بانتهاؤ دراسة برنامج الدكتوراة يجب أن يكون الخريج قادرا على: | <p>2.4. General and transferable skills</p> <p>Upon completion of the doctorate program (MD), the graduate must be able to:</p> | <p>4.2. (d) General and transferable skills</p> <p>Upon completion of the MD program in Ophthalmology, the graduate must be able to:</p> |
| ١,٤,٢. التواصل الفعال بأنواعه المختلفة | 2.4.1. Communicate (in writing and orally) effectively and respectfully with peers, faculty, colleagues, and other members of the health care team, understanding the role of consultations and referrals. | D.1. Facilitate efficient communication skills using all sorts. |

| | | |
|---|--|--|
| ٢,٤,٢. استخدام تكنولوجيا المعلومات ب ما يخدم تطوير الممارسة المهنية | 2.4.2. Use of information technology to serve Professional Practice Development. | D2. Use information technology to improve professional practice. |
| ٢,٤,٣. تعليم الآخرين وتقييم أداءهم | 2.4.3. Demonstrate effective teaching and evaluating others. | D.3. Facilitate methods of teaching and evaluating others. |
| ٤,٢,٤. التقييم الذاتي والتعلم المستمر. | 2.4.4. Self-assessment and continuous learning. | D.4. Interpret data of skills of self-evaluation and identification of personal learning needs. D.5. Analyze Skills of self-assessment and continuous learning. |
| ٢,٤,٥. استخدام المصادر المختلفة للحصول على المعلومات والمعارف. | 2.4.5. use physical information resources (print, analog), online (electronic, digital,) text, audio-video, book and journal to address medical questions and knowledge to sustain professional growth | D.6. Use different information resources (books, online, ...) to sustain knowledge. |
| ٢,٤,٦. العمل في فريق وقيادة فرق العمل | 2.4.6. Work as a member in larger teams and as well as a team leader knows how to develop "teaming strategy" to plan how people will act and work together. | D.6. Put roles and indicators for team performance evaluation and appraisal. D.7. Plan how team will learn and perform together |
| ٢,٤,٧. إدارة اللقاءات العلمية والقدرة علي إدارة الوقت | 2.4.7. Manage of scientific meetings and the ability to manage Time effectively. | 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 with perfect time management |

ANNEX [3] Matrix of Coverage of program ILOs By Contents

| Courses (List of courses in first and second parts) | Program Intended Learning Outcomes (ILOs) | | | |
|---|---|---------------------------------|--------------------------------------|------------------------------------|
| | A. Knowledge and Understanding | B. Intellectual skills | C. Professional and Practical Skills | D. General and Transferable skills |
| | A | B | C | D |
| 1. Physiology | A1,2,3,4,6 | B1,2 | C1,2,3 | D1,2,4 |
| 2. Anatomy | A1,8 | B1,2 | C1,2,3 | D1,3 |
| 3. Optics | A1,8 | B.1,7 | C.2 | D.1,4 |
| 4. Pathology | A1,A2,A3 | B1, B3, B8, B9 | C3, C5 | D1,D4 |
| 5. Medical statistics and Research Design | A2,4,5 | B3,4,6,7,8,9 | C2,3,8 | D1,2,3,4,5,6,7,8 |
| 6. Use of computer in medicine | A5 | B3,4 | C7,8 | D1,3,4,8 |
| 7. Ophthalmic medicine | A1,3,4,5,6,7 | B2,5,7,8,9,10,11,12,13,14,15,16 | C.1,2,3,4,5,6,7,8,9,10 | D.1,2,3,4,5,6,7,8 |

| | | | | |
|------------------------------|----------------------------|---------------------------------|---|-------------------------------|
| 8. Ophthalmic surgery | A.1,2,3,4 5,6,7 | B.1,2,3,4, 5,6,7,8,9 | C.1,2,3,4, 5,6,7,8,9, 10 | D.1,2,3, 4,5,6,7,8 |
|------------------------------|----------------------------|---------------------------------|---|-------------------------------|

ANNEX [4] Matrix of Coverage of program 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 | A1,2,3,4,5,6,7 | b1,b2,b3,b4,b5,b6, b8,b9,10,11,13,14, 15,16 | | |
| Clinical (Including case presentation and bed side clinical) | | | C.1,2,3,4,5,6,7,8,9,1 0 | |
| Presentation/seminar | | | C.1,2,3 | D.1,2,3,4,5,6,7,8 |
| Journal club | A1,2,3,4,5 | | | D.1,2,3,4,5,6,7,8 |
| Thesis discussion | | | | D.1,2,3,4,5,6,7,8 |
| Training courses & workshops | | b1,b2,b3,b4,b5,b6, b8,b9,10,11,13,14, 15,16 | C.1,2,3,4,5,6,7,8,9.1 0 | D.1,2,3,4,5,6,7,8 |
| Online webinars | A1,2,3,4,5 | B.1,2,3,4,5,6,7,8,9 | | D.1,2,3,4,5,6,7,8 |

ANNEX[5] Matrix of Coverage of program ILOs by Methods of Assessment

| | |
|--|--|
| | Intended Learning Outcomes (ILOs) |
|--|--|

| Methods of Assessment | A.Knowledge & Understanding | B.Intellectual Skills | C. Professional & Practical skills | D. General & Transferable Skills |
|----------------------------------|-----------------------------|--|------------------------------------|----------------------------------|
| | A | B | C | D |
| Written exam | a1,a2,a3,a4,a5,a6,a7 | b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16 | | |
| Clinical exam | | | C.1,2,3,4,5,6,7,8,9,10 | |
| Oral Exam | a1,a2,a3,a4,a5,a6,a7 | b1,b2,b3,b4,b5,b6,b7,b8,b9,b10,b11,b12,b13,b14,b15,b16 | | |
| Assignment | | | | D.1,2,3,4,5,6,7,8 |
| Case presentation and discussion | A.1,2,3,4,5 | B.1,2,3,4,5,6,7,8 | C.1,4 | |

| | | | | |
|---------------|---------------------------------------|---|---|---|
| Thesis | a1,a2, a3,a4,a5,a6 .a7 | b1,b2,b3,b4,b 5,b6,b7,b8,b9 ,b10,b11,b12, b13,b14,b15,b 16 | c1, c2, c2,c3,c4,c5,c6,c 7,c8,c9,c10 | d1, d2, d3,d4,d5,d6,d7, d8 |
|---------------|---------------------------------------|---|---|---|

Course Specifications of Physiology in Medical Doctorate in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology

| 1. Course Information | | |
|---|--|--|
| <ul style="list-style-type: none">● Academic Year/level: first part | <ul style="list-style-type: none">● Course Title: course specification of Physiology in Doctorate degree in Ophthalmology | <ul style="list-style-type: none">● Code OO100 MD |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of 48 hours- Practical/clinical: Total of 24 hours | | |
| 2. Overall Aims of the course | <i>By the end of the course the student must be able to:</i> <ul style="list-style-type: none">1. To prepare a ophthalmologist oriented with the physiology of the Eye ..2. To integrate physiological data with the ongoing basic sciences: anatomy, and physics and their clinical applications.3. To develop the basic scientific research skills as well as effective communication and team work attitudes. | |
| 3. Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i> | | |
| A- Knowledge and Understanding | <ul style="list-style-type: none">a1. Recognize and describe visual tract and its central nervous system connections.a2. Recognize and describe cranial nerves relation with visual sensation.a3. Explain the physiologic mechanisms of the Eye. | |

| | | | |
|--|---|--------------------------------------|--------------------------------------|
| | | | |
| B- Intellectual Skills | B1. link between knowledge for professional problems solving. | | |
| C- Professional and Practical Skills | C1. Write and evaluate Ophthalmology reports. | | |
| D- General and transferable Skills | D1. The use of different sources to obtain information and knowledge. D2. manage time efficiently. D3. learn himself continuously. | | |
| 4. Course Contents | | | |
| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours hours/week |
| Corneal physiology | 15 min | 15 min | 30 min |
| Protective mechanisms of the eye | 15 min | 15 min | 30 min |
| Physiology of aqueous humor | 15 min | 15 min | 30 min |
| Lens metabolism | 15 min | 15 min | 30 min |
| Entoptic phenomenon | 15 min | 15 min | 30 min |
| Physiology of color vision | 15 min | 15 min | 30 min |
| Visual pathway | 15 min | 15 min | 30 min |
| Electrophysiology of vision | 15 min | 15 min | 30 min |
| Total | 2 hours | 2 hours | 4 |
| 5. Teaching and Learning Methods | Lectures and practical sessions | | |
| 6. Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none">● Extra Didactic (lectures, seminars, tutorial) according to their needs● Grand rounds according to their needs | | |
| 7. Student Assessment | | | |
| A. Student Assessment Methods | 1-written examination to assess knowledge & understanding. 2-Oral examination to assess knowledge & understanding & attitude. 3-Observation of attendance & absenteeism | | |

| | |
|---|---|
| B. Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination week 25 2-Assessment 2: oral examination week 25 3-Assessment of attendance & absenteeism throughout the course |
| C. Weighting of Each Method of Assessment | Final term written examination 100 marks Oral 100 marks Total 200 marks |
| 8. List of References | |
| A. Course Notes/handouts | Course Notes: lecture notes prepared by staff members in its department |
| B. Recommended Text Books | Hugh Davson, The physiology of the eye, 3 rd edition, ISBN: 978-0-12-206740-2 |

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



Date of last update& approval by department Council:

5/ 3 / 2023

(نموذج رقم ١١ أ)

| | |
|---|-------------|
| الدوره الخاصه بتدريس ماده الفسيولوجى لطلاب درجه الدكتوراة | مسمى المقرر |
| OO 100 | كود المقرر |

.....المنيا : جامعة/أكاديمية
الطب البشرى : كلية / معهد
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 |
| Corneal physiology | | 1-3 | | 1 | 3 |

| | | | | | |
|-----------------------------|--|------------|----------|----------|------------|
| Aqueous humor | | 1-3 | 1 | 1 | 1,2 |
| Lens metabolism | | 1-3 | | | 1,2 |
| Color vision | | 1-3 | 1 | 1 | |
| Entoptic phenomenon | | 1-3 | | 1 | |
| Visual pathway | | 1-3 | 1 | | |
| Electrophysiology of vision | | 1-3 | | | 2,3 |

B) Matrix of coverage by methods of teaching

| 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 | 1, 2, 3 | 1 | 1 | 1, 2 |
| Practical | 1,2,3 | 1 | 1 | 1, 2, 3 |

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 | 1-2-3 | 1 | | 1-3 |
| OSCE | | 1 | | 1-3 |
| CIVA | | | 1-2 | 1-3 |
| Oral Exam | 1,2,3,4 | 1 | | 1,3 |

Blueprint of Postgraduate Physiology Course for MD degree (1st part) of Ophthalmology Department (Code: OO 100) (100 marks)

| Topic | H ou rs | K no wl ed ge % | In tel lec tu al % | W eig ht % | Ac tu al M ar k | Modifie d mark |
|---|------------------------|--|---|-------------------------------|--|---------------------------|
| 1. Physiology of Cornea: corneal transparency | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 2. Protective mechanisms of the eye | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 3. Physiology of aqueous humor | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 4. Physiological basis of lens Metabolism: | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 5. Physiological basis of color vision | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 6. Physiology of Entoptic phenomenon | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 7. Physiology of visual pathway | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 8. Electrophysiology of vision | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| Total | 48 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof.Dr/ Ahmed Mohamed Kamal EL-Shafie

Course Specifications of Anatomy in MD degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology

| Course Information | | |
|---|---|---|
| <ul style="list-style-type: none">● Academic Year/level: First part | <ul style="list-style-type: none">● Course Title: anatomy related to ophthalmology | <ul style="list-style-type: none">● Code: OO100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of didactic :48 hours; 2 hours/week- Practical/clinical: Total of 24 hours; 1 hour/week | | |
| Overall Aims of the course | <i>By the end of the course the student must be able to:</i> The student should acquire the anatomic facts necessary for ophthalmology. | |
| Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i> | | |
| A- Knowledge and Understanding | A.1 Mention anatomic Principles of <ul style="list-style-type: none">● Lid● Orbit● Anterior segment● Posterior segment | |

| | | | |
|---|--|--|--|
| | | | |
| B- Intellectual Skills | B.1 Correlates the facts of Anatomy with clinical reasoning, diagnosis and management of common diseases related to ophthalmology. | | |
| C- Professional and Practical Skills | C.1 Master the basic skills in the Anatomy related to ophthalmology. C.2 Master Use of information technology to support decisions related to Anatomy of ophthalmology. | | |
| D- General and transferable Skills | D.1 Perform data management including data entry and analysis. | | |
| Course Contents | | | |
| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours hours/week |
| 1- Lid | 15 min | 15 min | 30 min |
| 2-Cornea and sclera | 15 min | 15 min | 30 min |
| 3- Lens and zonular system | 15 min | 15 min | 30 min |
| 4- Uveal tissue | 15 min | 15 min | 30 min |
| 5- Retina | 15 min | 15 min | 30 min |
| 6- Optic nerve and visual pathway | 15 min | 15 min | 30 min |
| 7- Orbital nerves and vessels | 15 min | 15 min | 30 min |
| 8- Extraocular muscles | 15 min | 15 min | 30 min |
| Total | 2 hours | 2 hours | 4 |

| | |
|---|---|
| 9. Teaching and Learning Methods | <ul style="list-style-type: none"> ● Didactic (lectures, seminars, tutorial) ● Observation and supervision ● Written & oral communication ● Senior staff experience |
| 10. Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none"> ● Extra Didactic (lectures, seminars, tutorial) according to their needs ● Grand rounds according to their needs |
| Student Assessment | |
| A. Student Assessment Methods | <ul style="list-style-type: none"> ● Written and oral examination ● Assessment of practical skills) ● Log book |
| B. Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination week 25 2-Assessment 2: oral examination week 25 3-Assessment of attendance & absenteeism throughout the course |
| C. Weighting of Each Method of Assessment | 100 marks written 100 marks oral |
| List of References | |
| <ul style="list-style-type: none"> ● Course Notes/handouts | <ul style="list-style-type: none"> ● Course notes ● Staff members print out of lectures and/or CD copies |
| <ul style="list-style-type: none"> ● Recommended Text Books | Wolff's anatomy of the eye and orbit, 8 th edition |

- **Head of Department:**

Prof Dr Ahmed Mohamed Kamal Elshafie

Date of last update & approval by department Council:

5 / 3 / 2023

(نموذج رقم ١١ أ)

| | |
|--|-------------|
| الدوره الخاصه بتدريس ماده التشريح لطلاب درجه الدكتوراه | مسمى المقرر |
| OO 100 | كود المقرر |

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

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 |
| LID | | 1 | 1 | | |

| | | | | | |
|---------------------|--|----------|----------|------------|----------|
| Orbit | | 1 | 1 | 2 | 1 |
| Cornea and sclera | | 1 | 1 | 1 | |
| Uveal tissue | | 1 | 1 | 2 | |
| Lens and zonules | | 1 | 1 | 2 | 1 |
| Visual pathway | | 1 | 1 | 2 | |
| Extraocular muscles | | 1 | 1 | 1,2 | |
| Post segment | | 1 | 1 | 2 | 1 |

B. Matrix of coverage 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 | 1 | 1 | | |
| Practical | | 1 | 1,2 | 1 |

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 |
| Paper based | 1 | | | |
| CIVA exam | | 1 | 1-2 | |
| Oral Exam | 1 | 1 | | |

**Blueprint of Postgraduate Anatomy Course for MD degree (1st part) of
Ophthalmology Department (Code: OO 100) (100 marks)**

| Topic | Hours | Knowledge % | Intellectual % | Weight % | Actual Mark | Modified mark |
|--|--------------|--------------------|-----------------------|-----------------|--------------------|----------------------|
| 1. Anatomy of Cornea and sclera | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 2. The eyelid | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 3. Anatomy of lens | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 4. Anatomy of uveal tissue | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 5. Anatomy of retina | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 6. Orbital nerves and vessels | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 7. Optic nerve and visual pathway | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 8. Extraocular muscles | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| Total | 48 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof.Dr/ Ahmed Mohamed Kamal EL-Shafie

Course Specifications of Optics in MD degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology department

Department: Ophthalmology department

| Course Information | | |
|--|---|---|
| <ul style="list-style-type: none">● Academic Year/level: First part | <ul style="list-style-type: none">● Course Title: optics | <ul style="list-style-type: none">● Code: OO100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of 48 hours; 2 hours/week- Practical/clinical: Total of 24 hours; 1 hours/week | | |
| Overall Aims of the course | <i>By the end of the course the student must be able to:</i> The student should acquire the optical facts necessary for ophthalmology | |
| Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i> | | |
| a. Knowledge and Understanding | a.1. Mention the basics of general optics. a.2. Describe optical details of ophthalmological devices, lenses and lasers | |
| b. Intellectual Skills | B.1. Correlates the facts of Optics with clinical reasoning, diagnosis and management of common diseases related to ophthalmology. | |

| | | | |
|---|--|--|--|
| c. Professional and Practical Skills | C.1. Master the basics of general optics. C.2. Use information technology to support decisions related to optics of ophthalmology. | | |
| d. General and transferable | D.1. Examine optics of devices related to ophthalmology | | |
| Course Contents | | | |
| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours hours/week |
| 1-light refraction | 15 min | 15 min | 30 min |
| 2- Intraocular lenses | 15 min | 15 min | 30 min |
| 3-light reflection | 15 min | 15 min | 30 min |
| 4- Optics of prisms | 15 min | 15 min | 30 min |
| 5- Errors of refraction | 15 min | 15 min | 30 min |
| 6- Optics of ophthalmic devices | 15 min | 15 min | 30 min |
| 7- Ophthalmic Lasers | 15 min | 15 min | 30 min |
| 8- Low vision Aids | 15 min | 15 min | 30 min |
| Total | 2 hours | 2 hours | 4 |
| Teaching and Learning Methods | <ul style="list-style-type: none">● Didactic (lectures, seminars, tutorial)● Observation and supervision● Written & oral communication● Senior staff experience | | |
| Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none">● Extra Didactic (lectures, seminars, tutorial) according to their needs | | |

| | |
|--|--|
| | |
| Student Assessment | |
| A-Student Assessment Methods | <ul style="list-style-type: none"> ● Written and oral examination ● Assessment of practical skills) ● Log book |
| B- Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination week 25 2-Assessment 2: oral examination week 25 3-Assessment of attendance & absenteeism throughout the course |
| C- Weighting of Each Method of Assessment | 100 marks paper based 100 marks oral |
| List of References | |
| <ul style="list-style-type: none"> ● Course Notes/handouts | <ul style="list-style-type: none"> ● Course notes ● Staff members print out of lectures and/or CD copies |
| <ul style="list-style-type: none"> ● Essential Books | <ul style="list-style-type: none"> ● Text books written by the department of ophthalmology |
| <ul style="list-style-type: none"> ● Recommended Text Books | Clinical Optics, American Academy of ophthalmology, Basic and clinical science course 2017-18 |

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

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



نموذج رقم (١١ أ)

| | |
|---|-------------|
| الدوره الخاصه بتدريس ماده لطلاب درجه البصريات الدكتوراه | مسمى المقرر |
| OO 100MD | كود المقرر |

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

A- Matrix of Coverage of Course ILOs By Contents

| Contents (List of course topics) | Intended Learning Outcomes (ILOs) | | | |
|---|-----------------------------------|------------------------|------------------------------------|----------------------------------|
| | A. Knowledge & Understanding | B. Intellectual Skills | C. Professional & Practical skills | D. General & Transferable Skills |
| | A | B | C | D |
| 1-light refraction | 1-2 | 1 | 2 | |
| 2-Prisms | 1 | 1 | 2 | 1 |
| 3-light reflection | 1-2 | 1 | | 1 |

| | | | | |
|------------------------------|------------|----------|----------|----------|
| 4-Describe optics of devices | 1-2 | 1 | | 1 |
| 5- Errors of refraction | 1-2 | 1 | | |
| 6-Lasers | 2 | 1 | 2 | 1 |
| 7- Intraocular lenses | 1-2 | 1 | 1 | |
| 8- Low vision aids | 1-2 | 1 | | |

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 | 1-2 | | | |
| Practical | | 1 | 1-2 | 1 |

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 | 1-2 | | | |
| OSCE | | 1 | 1-2 | |
| Oral Exam | 1-2 | 1 | 1-2 | 1 |

**Blueprint of Postgraduate Optics Course for MD degree (1st part) of
Ophthalmology Department (Code: OO 100) (100 marks)**

| Topic | Hours | Knowledge % | Intellectual % | Weight % | Actual Mark | Modified mark |
|-------------------------|-------|-------------|----------------|----------|-------------|---------------|
| 1. Light reflection | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 2. Light refraction | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 3. Prisms | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 4. Errors of refraction | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 5. Intraocular lenses | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 6. Ophthalmic devices | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 7. Lasers | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| 8. Low vision aids | 6 | 75 | 25 | 12.5 | 12.5 | 12.5 |
| Total | 48 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof.Dr/ Ahmed Mohamed Kamal EL-Shafie



Course Specifications of Pathology in Medical Doctorate in Ophthalmology

University: Minia

Faculty: Medicine

Department: ophthalmology

| Course Information | | |
|---|---|--|
| <ul style="list-style-type: none">● Academic Year/level: First part | <ul style="list-style-type: none">● Course Title: pathology | <ul style="list-style-type: none">● Code: OO 100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of 48 hours; 2 hours/week- Practical/clinical: Total of 24 hours; 1 hour/week | | |
| Overall Aims of the course | By the end of the course the student must be able to: the pathological facts necessary for ophthalmology. | |
| Intended learning outcomes of course (ILOs): Upon completion of the course, the student should be able to: | | |
| A- Knowledge and Understanding | A1. Describe Pathologic Details of: 1. Lid pathology 2. Anterior segment pathology 3. Posterior segment pathology 4. Pathology of the orbit 5. Infection | |
| B- Intellectual Skills | B.2. Correlates the facts of Pathology with clinical reasoning, diagnosis and management | |

| | | | |
|---|--|--|--|
| | of common diseases related to ophthalmology. . | | |
| C- Professional and Practical Skills | C1. Master the basic skills in the Pathology of ophthalmology C2. Master Use of information technology to support decisions related to pathology of ophthalmology. C3. Examine Pathological slides of common disorders related to ophthalmology. | | |
| D- General and transferable Skills | D.1. Perform data management including data entry and analysis. | | |
| Course Contents | | | |
| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours hours/week |
| a-lid pathology | 30 min | 15 min | 45 min |
| b-Anterior segment pathology | 30 min | 15 min | 45 min |
| c- Posterior segment pathology | 30 min | 15 min | 45 min |
| d- Orbit pathology | 30 min | 15 min | 45 min |
| e- Infection | 30 min | 15 min | 45 min |
| f- Ocular tumors | 30 min | 15 min | 45 min |

| | |
|--|---|
| Teaching and Learning Methods | <ul style="list-style-type: none"> ● Didactic (lectures, seminars, tutorial) ● Observation and supervision ● Written & oral communication ● Senior staff experience |
| Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none"> ● Extra Didactic (lectures, seminars, tutorial) according to their needs |
| Student Assessment | |
| 1-Student Assessment Methods | Assessment tools: <ol style="list-style-type: none"> 1. Written and oral examination 2. Assessment of practical skills) 3. Log book |
| 2-Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination week 25 2-Assessment 2: oral examination week 25 3-Assessment of attendance & absenteeism throughout the course |
| 3-Weighting of Each Method of Assessment | 100 marks paper based 100 marks oral |
| List of References | |
| <ul style="list-style-type: none"> ● Course Notes/handouts | <ul style="list-style-type: none"> ● Course notes ● Staff members print out of lectures and/or CD copies |
| <ul style="list-style-type: none"> ● Recommended Text Books | Ophthalmic Pathology, American Academy of ophthalmology, Basic and clinical science course 2017-18 |

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

نموذج رقم (١١ أ)

| | |
|---|-------------|
| الدوره الخاصه بتدريس ماده الباثولوجي لطلاب درجه الدكتوراه | مسمى المقرر |
| Medical Doctorate OO 100 | كود المقرر |

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

A-Matrix of Coverage of Course ILOs By Contents

| Contents (List of course topics) | Intended Learning Outcomes (ILOs) | | | |
|--|------------------------------------|---------------------------|---|--|
| | A. Knowledge & Understanding | B. Intellectual Skills | C. Professional & Practical skills | D. General & Transferable Skills |
| | A | B | C | D |
| | | | | |
| a-lid pathology | 1 | 1 | 1,3 | 1 |
| b-Anterior segment pathology | 1 | 1 | 2 | 1 |
| c- Posterior segment pathology | 1 | 1 | | 1 |

| | | | | |
|-----------------------|---|---|---|---|
| d- Orbit pathology | 1 | 1 | 2 | 1 |
| e- Infection | 1 | 1 | | 1 |
| f- Ocular tumors | 1 | 1 | | |

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 | |
| Lecture | 1 | | | 1 |
| Practical | | 1 | 1-2-3 | |

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 | 1 | | | |
| Practical exam | | 1 | 1-2 | |
| CIVA exam | | 1 | 1-3 | |
| Oral Exam | 1 | 1 | | |

**Blueprint of Postgraduate Pathology Course for MD degree (1st part) of
Ophthalmology Department (Code: OO 100) (100 marks)**

| Topic | Hours | Knowledge % | Intellectual % | Weight % | Actual Mark | Modified mark |
|------------------------|-------|-------------|----------------|----------|-------------|---------------|
| 1. Lid pathology | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| 2. Anterior segment | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| 3. Posterior segment | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| 4. Orbital pathologies | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| 5. Infections | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| 6. Orbital tumors | 8 | 75 | 25 | 16.6 | 16.6 | 16.6 |
| Total | 48 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof.Dr/ Ahmed Mohamed Kamal EL-Shafie



Course specification of:

“Medical Statistics and Research Methodology”

In MD degree

University: Minia

Faculty: Medicine

Department offering the course: Public health and preventive medicine department

Department offering the programme: Ophthalmology

Programme(s) on which the course is given: First part MD for all postgraduates

Academic year/ Level: First part of MD

| 1. Course Information | | |
|--|---|----------------------------|
| Academic Year/level: First part MD | Course Title: Medical Statistics and Research Methodology | Code: OO 100 |

| | |
|---|---|
| <p>(i) Number of teaching hours:</p> <p>- Lectures: 30 hours</p> <p>- Practical/clinical: 15 hours</p> <p>- Total: 45 hours</p> | |
| <p>2. Overall Aims of the course</p> | <p><i>By the end of the course the student must be able to:</i></p> <ol style="list-style-type: none"> 1. Gain skills necessary for proper practice in the field of Research Methods including diagnostic, problem solving and decision-making skills. 2. Apply ethical principles of scientific research with good awareness about patient's rights. 3. Use precisely the research methodology in researches 4. Influence the students to adopt an analytical thinking for evidence-based medicine 5. Enable graduate students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data 6. To use precisely computer programs SPSS, Epi Info and Excel in data analysis |
| <p>3. Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i></p> | |
| <p>A. Knowledge and understanding</p> | <ol style="list-style-type: none"> A.1. Define terms of research methodology. A.2. Describe the spectrum of research methodology. A.3. Explain the strategies and design of research. A.4. Describe the study design, uses, and limitations. A.5. Explain evidence-based Medicine A.6. Define causation and association. A.7. Tell the principles and fundamentals of ethics. A.8. Describe the different sampling strategies |

| | |
|---|--|
| | <p>A.9. Summarize the advantages and disadvantages of different sampling strategies</p> <p>A.10. Summarize different methods of samples size calculation</p> <p>A.11. Recognize the sources and the recent methods in data collection and analysis.</p> <p>A.12. Identify the types of variables</p> <p>A.13. Identify types of tabular and graphic presentation of data</p> <p>A.14. Describe the normal curves and its uses</p> <p>A.15. Identify the characters of normal distribution curve</p> <p>A.16. Identify measures of central tendency and measures of dispersion</p> <p>A.17. Explain regression analysis, its use and differentiate its types</p> <p>A.18. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests</p> <p>A.19. Explain the usefulness of screening tests</p> |
| B. Intellectual Skills | <p>B.1. Apply research methods to different community health problems.</p> <p>B.2. Apply appropriate research strategies for use.</p> <p>B.3. Select appropriate research methods.</p> <p>B.4. Teach and advocate appropriately in the research design.</p> <p>B.5. Describe the normal curves</p> <p>B.6. Describe and summarize data</p> <p>B.7. Select the proper test of significance for a specific data.</p> <p>B.8. Interpret selected tests of significance and the inferences obtained from such tests</p> |
| C. Professional and Practical Skills | <p>C.1. Plan a research proposal for community diagnosis.</p> <p>C.2. Design questionnaires.</p> |

| | | | |
|---|--|----------------|----------------------------|
| | C.3. Conduct research. C.4. Judge association and causation. C.5. Criticize for bias and confounding factors C.6. Design data entry file C.7. Validate data entry C.8. Manage data files C.9. Construct tables and graphs C.10. Calculate different samples sizes C.11. Calculate measures of central tendency and measures of dispersion C.12. Calculate sensitivity, specificity, and predictive values | | |
| D. General and transferable Skills | D.1. Lead a research team to conduct a specific study. D.2. Take part and work coherently with his associates to in research. D.3. Write scientific papers. D.4. Appraise scientific evidence D.5. Analyze and interpret data D.6. Use standard computer programs for statistical analysis effectively | | |
| 4. Course Contents | | | |
| Topic | No. of hours | Lecture | Tutorial/ Practical |
| <i>Research methods</i> | | | |
| <u>Introduction :</u> - Introduction to research. - Terminology and Rationale - Originality | | 3 | |
| <u>Study design :</u> -Cross sectional study and the prevalence rate -Cohort study, incidence rate, relative & attributable risk -Case-control study, Odd's ratio sampling -Experimental study and clinical trials | | 4 | |
| <u>Sources of Errors in Medical Research</u> <u>Bias and confounding and its Control.</u> | | 3 | |

| | | | |
|--|--|-----------|-----------|
| - Validity and reliability | | 2 | |
| - The questionnaire design | | 2 | |
| - Writing the Research Paper or Manuscript - Protocol Writing | | 2 | 2 |
| - Critic technique for the literature review | | 2 | 2 |
| - Association and causation | | 1 | |
| - Evidence -based approach in medical practice | | 2 | 1 |
| - Ethics of medical research | | 2 | |
| Statistics | | | |
| Sampling | | 1 | |
| Introduction to Sample Size Calculation | | 1 | 1 |
| Data presentation | | 1 | 1 |
| Tests of significance | | 2 | |
| Introduction to SPSS | | 1 | 1 |
| Proportion test | | | 1 |
| Chi-square test | | | 1 |
| Student T test, Paired T test | | | 1 |
| ANOVA test | | | 1 |
| Correlation (simple and multiple) | | | 1 |
| Regression | | | 1 |
| Screening | | 1 | 1 |
| Total | | 30 | 15 |
| 5. Teaching and Learning Methods | <p>Since COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of study is online</p> <p>Online learning materials are available at Minia University site</p> <ul style="list-style-type: none"> ▪ Lectures: Face to face lectures, Pre-recorded video lectures ▪ Practical lessons ▪ Assignment ▪ Online quizzes | | |
| 6. Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none"> • Outstanding student rewarded certificate of appreciation due to high level of achievement | | |

| | |
|---|--|
| | <ul style="list-style-type: none"> Limited students divided into small group to make learning more effective |
| 7. Student Assessment | |
| D. Student Assessment Methods | <p>7.1- Research assignment: to assess general transferable skills, intellectual skills.</p> <p>7.2- Written exams:</p> <ul style="list-style-type: none"> Short essay: to assess knowledge. Commentary: to assess intellectual skills. <p>7.3- Practical Exams: to assess practical skills, intellectual skills.</p> <p>7.4- Oral Exams: Oral exams to assess knowledge and understanding, attitude, communication</p> <p>7.5- Structured oral exams: to assess knowledge.</p> |
| E. Assessment Schedule (Timing of Each Method of Assessment) | <p>Assessment 1: Final written exam week: 24-28</p> <p>Assessment 2: Oral exam week: 24-28</p> <p>Assessment 3: Practical exam week: 24-28</p> |
| F. Weighting of Each Method of Assessment | <ul style="list-style-type: none"> Final Written Examination 100% Oral Examination 100% Practical Examination 100% Total 100% |
| 8- List of References | |
| A. Course Notes/handouts | <ul style="list-style-type: none"> Department notes, lectures and handouts |
| B. Essential Books | <ul style="list-style-type: none"> The Lancet Handbook of Essential Concepts in Clinical Research |

| | |
|--|---|
| <p>C. Recommended Textbooks</p> | <p><u>Research methods:</u></p> <ul style="list-style-type: none"> - Introducing Research Methodology; A Beginner's Guide to Doing a Research Project - Understanding Clinical Research, Renato Lopes and Robert Harrington; ISBN-10: 0071746781 ISBN-13: 978-0071746786 - Users' guides to the medical literature: a manual for evidence-based clinical practice: Guyatt, G., D. Rennie, M. Meade and D. Cook (2002), AMA press Chicago. - Research Methods in Community Medicine: Surveys, Epidemiological Research, Programme Evaluation, Clinical Trials, 6th Edition Joseph Abramson, Z. H. Abramson <p><u>Computer:</u></p> <ul style="list-style-type: none"> - Discovering statistics using IBM SPSS statistics, Field, A. (2013). sage. - Medical Statistics: A Guide to SPSS, Data Analysis and Critical Appraisal, Belinda Barton, Jennifer Peat - 2nd Edition Everitt, Brian S. - Medical statistics from A to Z: a guide for clinicians and medical students. Cambridge University Press, 2021. - Bowers, David. Medical statistics from scratch: an introduction for health professionals. John Wiley & Sons, 2019. |
|--|---|

| | |
|---------------------------------|--|
| | <ul style="list-style-type: none"> - Aviva, P. (2005): Medical Statistics at a Glance, Blackwell Company, 2nd, ed., Philadelphia |
| D. Periodicals, websites | <ul style="list-style-type: none"> - https://phrp.nihtraining.com/users/login.php - http://www.jhsph.edu/ - Journal of Biomedical Education - https://lagunita.stanford.edu/courses/Medicine/MedStats-SP/SelfPaced/about?fbclid=IwAR3nfirLM4wnuEqqUjLjk8TCR7lzPdnpgQwIn06L-GjFq32a62w3j6R5s9c |

○ **Course Coordinators:**

➤ **Coordinators:**

Lecturers: Dr / Chrestina Monir, Dr Shaimma Mahmoud

Assistant Coordinator: Assis .Lecturer Shaza Fadel

Head of Department:

Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1st approval by department council: 13 /5/2013.

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



نموذج رقم (١١)

| | |
|--|-------------|
| Medical Statistics and Research Methodology | مسمى المقرر |
| CM 100 | كود المقرر |

جامعة/أكاديمية : المنيا

كلية / معهد: الطب

قسم: الصحة العامة والطب الوقائي

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 |
| Introduction : - Introduction to research. - Terminology and Rationale - Originality | | A.1, A.2, | | | |
| - Study design : -Cross sectional study and the prevalence rate -Cohort study, incidence rate, relative & attributable risk -Case-control study, Odd's ratio sampling -Experimental study and clinical trials | | A.3, A.4, | B.1, B.2, B.3, B.4, | C.1, | |
| - Sources of | | | B.3, | C.5 | |

| | | | | | |
|--|--|----------------|----------|---------------|---------------|
| Errors in Medical Research - Bias and confounding and its Control. | | | | | |
| - Validity and reliability | | | | | |
| - The questionnaire design | | | | C.2, | |
| - Writing the Research Paper or Manuscript - Protocol Writing | | | B.3, | C.3, | D.1, D.2, D.3 |
| - Critic technique for the literature review | | | | | |
| - Association and causation | | A.6, | | C.4, | |
| - Evidence - based approach in medical practice | | A.5, | | | |
| - Ethics of medical research | | A.7 | | | |
| <u>Statistics</u> | | | | | |
| Sampling | | A.8, A.9, A.11 | | | D.4 |
| Introduction to Sample Size Calculation | | A.10 | | C.10 | D.4 |
| Data presentation | | A.13, A.14 | B.6 | C.9 | D.4 |
| Tests of significance | | A.15, A.16 | B.5 | C.11 | D.4 |
| Introduction to SPSS | | A.12 | B.6 | C.6, C.7, C.8 | D.5, D.6 |
| Proportion test | | A.11 | B.7, B.8 | | D.5, D.6 |
| Chi-square test | | A.11 | B.7, B.8 | | D.5, D.6 |
| Student T test, Paired T test | | A.11 | B.7, B.8 | | D.5, D.6 |

| | | | | | |
|--|--|------------|---------|------|----------|
| ANOVA test | | A.11 | B.7, B8 | | D.5, D.6 |
| Correlation (simple and multiple) | | A.11 | B.7, B8 | | D.5, D.6 |
| Regression | | A.17 | B.7, B8 | | D.5, D.6 |
| Screening | | A.18, A.19 | B.7, B8 | C.12 | D.4 |

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 | A.1, A.2, A.3, A.4, A.5, A.6, A.7, A.8, A.9, A.10, A.11, A.12, A.13, A.14, A.15, A.16, A.17, A.18 | B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.8 | | |
| Practical | | | C1, C.3, C4, C.5, C.6, C.7, C.8, C.9, C.10, C11, C.12 | |
| Assignment | A.11, A.13, A.18 | B.7, B.8 | C.2, C.6, C.8, C.9, C.10, C.12 | D.1, D.2., D.4, D.5, D.6 |

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 paper based exam | A.3, A.4, A.5, A.6, A.7, A.8, A.9, A.14, A.15, A16, A18 | B.3, B.5, | | |
| Practical exam (Statistical exam) | | | C.1, C.2, C.5, C.6, C.7,C.8, C.9, C.10, C.11, C.12 | |
| Oral exam | A.10, A11, A.12, A13, A.15, A.16, A.17, A18 | B.1, B.2, B.6, B.7, B.8 | | D.1, D.2, D.5, D.6 |

○ **Course Coordinators:**

➤ **Coordinators:**

Lecturers: Dr / Chrestina Monir, Dr Shaimma Mahmoud

Assistant Coordinator: Assis .lecturer Shaza Fadel

Head of Department:

Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1st approval by department council: 13 /5/2013.

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

Faculty of Medicine, Minia University: MD Program of Medical Parasitology

Dr. N. K. S.

Test blueprint for Research methodology course

| Topic | Hour | % of topic | Total No. of items | Written exam (100 marks) | | Marks (%) | Modified marks (%) |
|---|-----------|-------------|--------------------|--------------------------|--------------|-----------|--------------------|
| | | | | Knowledge | Intellectual | | |
| Research | | | | | | | |
| - Introduction to research. - Terminology and Rationale - Originality | 3 | 10% | 5 | 4 | 1 | 7% | 5% |
| - Writing the Research Paper or Manuscript - Protocol Writing | 2 | 6.67% | 4 | 1 | 3 | 13% | 10% |
| - Association and causation | 1 | 3.33% | 3 | 2 | 1 | 7% | 8% |
| - Evidence -based approach in medical practice | 2 | 6.67% | 1 | 1 | | 3% | 5% |
| - Ethics of medical research | 2 | 6.67% | 2 | 2 | | 3% | 6% |
| Statistics | | | | | | | |
| Sampling | 1 | 3.33% | 2 | 1 | 1 | 4% | 4% |
| Introduction to Sample Size Calculation | 1 | 3.33% | 1 | 1 | | 2% | 2% |
| Data presentation | 1 | 3.33% | 3 | 2 | 1 | 5% | 4% |
| Tests of significance | 2 | 6.67% | 2 | 1 | 1 | 8% | 8% |
| Introduction to SPSS | 1 | 3.33% | 1 | 1 | | 3% | 3% |
| Screening | 1 | 3.33% | 2 | 1 | 1 | 3% | 3% |
| Total | 30 | 100% | | | | | 100% |

Course specification of :

- “Use of Computer in Medicine”
in MD degree

University: Minia

Faculty: Medicine

Department offering the course: Public health and preventive medicine department

Programme(s) on which the course is given: First part MD in Ophthalmology

Academic year/ Level: First part of MD

| 1. Course Information | | |
|--|--|---------------------|
| Academic Year/level: First part MD | a) Course Title: Use of Computer in Medicine | Code: OO 100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: 20 hours- Practical/clinical: 10 hours- Total: 30 hours | | |
| 2. Overall Aims of the course | By the end of the course the student must be able to: | |
| | <ol style="list-style-type: none">1. Recognize knowledge about the software and their applications in Medicine2. Gain skills necessary for using and managing health care information systems | |
| 3. Intended learning outcomes of course (ILOs): | | |
| Upon completion of the course, the student should be able to: | | |

| | | | |
|--|--|----------------|----------------------------|
| A. Knowledge and understanding | A.1. Define each part of computer hardware and its function A.2. Have a basic understanding of various computer applications in medicine - for instruction, information managing, and computer based medical record, etc. A.3. Define telemedicine and its importance A.4. Recognize importance of health information technology in improvement of healthcare A.5. Describe electronic medical records and obstacles facing it A.6. Identify the concept of big data analysis | | |
| B. Intellectual Skills | B.1. Criticize adoption of telemedicine B.2. Discover factors constraining adoption of telemedicine | | |
| C. Professional and Practical Skills | C.1. Design framework for understanding of health information system performance | | |
| D. General and transferable Skills | D.1. Utilize computers in conducting research D.2. Appraise adoption of telemedicine D.3. Discover skills to carry out the process of improving health information system performance | | |
| 4. Course Contents | | | |
| Topic | No. of hours | Lecture | Tutorial/ Practical |
| Use of Computer in Medicine | | | |
| General concepts Introduction to Microsoft PowerPoint | 6 | 4 | 2 |
| Health Information Systems (HIS) | 6 | 4 | 2 |
| Telemedicine | 6 | 4 | 2 |
| Software Used in the Health Care | 6 | 4 | 2 |
| Big Data Analysis in Health | 6 | 4 | 2 |
| Total | 30 | 20 | 10 |

| | |
|--|--|
| 5. Teaching and Learning Methods | <p>Since COVID-19 pandemic, blended learning approach was adopted that mixes virtual face-to-face interaction activities with the online learning. 60% of study method is offline and 40% of study is online</p> <p>Online learning materials are available at Minia University site</p> <ul style="list-style-type: none"> ▪ Lectures: Face to face lectures, Pre-recorded video lectures ▪ Practical lessons ▪ Assignment ▪ Online quizzes |
| 6. Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none"> • Outstanding student rewarded certificate of appreciation due to high level of achievement • Limited students divided into small group to make learning more effective |
| 7. Student Assessment | |
| A. Student Assessment Methods | <p>7.1- Research assignment: to assess general transferable skills, intellectual skills.</p> <p>7.2- Written exams:</p> <ul style="list-style-type: none"> • Short essay: to assess knowledge. • Commentary: to assess intellectual skills. <p>7.3- Practical Exams: to assess practical skills, intellectual skills.</p> <p>7.4- Oral Exams: Oral exams to assess knowledge and understanding, attitude, communication</p> <p>7.5- Structured oral exams: to assess knowledge.</p> |
| B. Assessment Schedule (Timing of Each Method of Assessment) | <p>Assessment 1: Final written exam week: 24-28</p> <p>Assessment 2: Oral exam week: 24-28</p> <p>Assessment 3: Practical exam week: 24-28</p> |
| C. Weighting of Each Method of Assessment | <p>Final Written Examination 100%</p> <p>Oral Examination 100%</p> <p>Practical Examination 100%</p> |

| | |
|---------------------------------|---|
| | Total 100% |
| 8. List of References | |
| A. Course Notes/handouts | Department notes, lectures and handouts |
| B. Essential Books | Essential Medical Statistics, Betty R. Kirkwood and J. A. Sterne (2000), 2nd edition |
| C. Recommended Textbooks | Data Management and Analytics for Medicine and Healthcare: Begoli, Edmon, Fusheng Wang, and Gang Luo. Springer, 2017. |
| D. Periodicals, websites | <ul style="list-style-type: none"> - National Institutes of Health: http://www.nih.gov - American Medical Informatics Association: http://www.amia.org/ |

○ **Course Coordinators:**

➤ **Coordinators:**

1) **Lecturers:** Dr / Shaimma Mahmoud, Dr/ Chrestina Monir
(2Assistant coordinator: Assistant lecture Shaza Fadel

○ **Head of Department:**

Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1st approval by department council: 13 /5/2013.

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



(11) نموذج رقم

جامعة/ أكاديمية :المنيا

كلية /معهد :الطب

قسم :الصحة العامة والطب الوقائي

| | |
|-----------------------------|-------------|
| Use of Computer in Medicine | مسمى المقرر |
| CM 100 | كود المقرر |

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 |
| Use of Computer in Medicine | | | | | |
| General concepts Introduction to Microsoft PowerPoint | | A.1, A.2, | | | D.1 |
| Health Information Systems (HIS) | | A.4, A.5 | | C1 | D.3 |
| Telemedicine | | A.3 | B.1, .2 | | D.2 |
| Software Used in the Health Care | | A.5, A.6 | | | D.1 |
| Big Data Analysis in Health | | A.6 | | | |

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 | A.1 to A.6 | B.1, | | |
| Practical | | | C1 | |
| Assignment | A.4 | B.2 | | D1.D.2,D3 |

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 paper based exam | A.1, to A.6 | B.1 | | |
| Practical computer exam (For SPSS, PowerPoint) | | | C1 | D.1 |
| Oral Exam | A.4, A..6 | B.2 | C.1 | D.2, D.3 |

- **Course Coordinators:**

➤ **Coordinators:**

2) **Lecturers:** Dr / Shaimma Mahmoud, Dr/ Chrestina Monir

(2Assistant coordinator: Assistant lecture Shaza Fadel

- **Head of Department:**

Professor Dr. Nashwa Nabil Kamal

Date of program specifications 1st approval by department council: 13 /5/2013.

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



Test blueprint for Uses of computer in Medicine course

| Topic | Hour | % of topic | Total No. of items | Written exam (100 marks) | | Marks (%) | Modified marks (%) |
|--|------|------------|--------------------|--------------------------|--------------|-----------|--------------------|
| | | | | Knowledge | Intellectual | | |
| Use of Computer in Medicine | | | | | | | |
| General concepts Introduction to Microsoft PowerPoint | 4 | 20% | 6 | 4 | 2 | 30% | 30% |
| Health Information Systems (HIS) | 4 | 20% | 4 | 4 | | 20% | 15% |
| Telemedicine | 4 | 20% | 6 | 2 | 4 | 25% | 30% |
| Software Used in the Health Care | 4 | 20% | 5 | 4 | 1 | 20% | 15% |
| Big Data Analysis in Health | 4 | 20% | 1 | 1 | | 5% | 10% |
| Total | 20 | 100% | 20 | | | 100% | 100% |

Course Specifications of Ophthalmic Medicine in MD degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology

| 1-Course Information | | |
|---|---|--|
| <ul style="list-style-type: none">● Academic Year/level: Second part | <ul style="list-style-type: none">● Course Title: Medical <i>ophthalmology</i> | <ul style="list-style-type: none">● Code OO 100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of didactic -240 hours; 4 hours/week- Practical/clinical: Total of 300 hours; 5 hours/week | | |
| 2-Overall Aims of the course | <i>By the end of the course the student must be able to:</i> | |
| | 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-Intended learning outcomes of course (ILOs): | | |

Upon completion of the course, the student should be able to:

**A- Knowledge
and
understanding**

. A.1. Describe the etiology, clinical picture, diagnosis and management of the clinical conditions related to different aspects of ophthalmology:

- General rules of ophthalmology
- lid diseases
- Corneal diseases
- lens diseases
- uveitis
- Retinal diseases
- conjunctival diseases
- orbital diseases
- vascular diseases of the eye
- Glucoma
- Ocular tumors

A.2. Mention the principles of :

- Epidemiology of ophthalmology related problems
- ophthalmology related radiology
- Diagnostic procedures

| | |
|-------------------------------|--|
| | <p>A.3. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to ophthalmology.</p> <p>A.4. Mention the basic ethical and medicolegal principles that should be applied in practice and are relevant to ophthalmology.</p> <p>A.5. Mention the basics and standards of quality assurance to ensure good clinical practice in the field of ophthalmology.</p> <p>A.6. Mention the ethical and scientific principles of medical research methodology.</p> <p>A.7. State the impact of common health problems in the field of ophthalmology on the society and how good clinical practices improve these problems.</p> |
| B- Intellectual Skills | <p>B.1. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to ophthalmology</p> <p>B.2. Relate investigatory and analytic thinking (problem solving) approaches to common clinical situations related to ophthalmology.</p> <p>B.3. Design and /or present a case or review (through seminars/journal clubs.) in one or more of common clinical problems relevant to the field of ophthalmology.</p> <p>B.4. Formulate management plans and alternative decisions in different situations in the field of the</p> |

| | |
|---|--|
| | ophthalmology |
| C- Professional and Practical Skills | <p>C.1. Take proper history and examine patients in caring and respectful behaviours.</p> <p>C.2. Perform the non-invasive/ invasive diagnostic procedures Such as X-rays, C.T & M.R.I</p> <p>C.3. Interpret the non-invasive/invasive diagnostic procedures Such as X-rays, C.T & M.R.I</p> <p>C.4. Perform the following non-invasive/invasive therapeutic procedures</p> <p>C.5 Assist staff in different ophthalmology</p> <p>C.6. Carry out patient management plans for common conditions related to ophthalmology</p> <p>C.7. Use information technology to support patient care decisions and patient education in common clinical situations related to Procedure presentation.</p> <p>C.8. Provide health care services aimed at preventing health problems related to Procedure presentation like:</p> <p>C.8. surgical infection of lid skin & soft tissue</p> <p>C.9. Provide patient-focused care in common conditions related to ophthalmology, while working with health care professionals, including those from other disciplines for the conditions mentioned above in A.A.</p> |

| | | | |
|---|---|--|--|
| | C.10. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records). | | |
| D- General and transferable Skills | D.1. 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 |
| lid diseases | 30 min | 30 min | 1 |
| Conjunctival diseases | 30 min | 30 min | 1 |
| Corneal diseases | 30 min | 30 min | 1 |
| lens diseases | 30 min | 30 min | 1 |
| Glaucoma | 30 min | 30 min | 1 |
| Uveitis | 30 min | 30 min | 1 |
| Intraocular tumors | 30 min | 30 min | 1 |
| Retinal diseases | 30 min | 30 min | 1 |
| Neuro-ophthalmology | 30 min | 30 min | 1 |
| orbital diseases | 30 min | 30 min | 1 |
| B- Student Assessment Methods | <ul style="list-style-type: none">● Didactic (lectures, seminars, tutorial)● Clinical rounds● (Service teaching) Observation | | |

| | |
|--|---|
| | <ul style="list-style-type: none"> ● Perform under supervision of senior staff ● Simulations ● Case presentation ● Written & oral communications ● Seminar ● journal club ● Operative ● Outpatient ● Inpatient |
| C- Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination 2-Assessment 2: oral examination 3-Assessment 3: OSCE, and CIVA 4- Logbook of attendance & absenteeism throughout the course |
| D- Weighting of Each Method of Assessment | Paper based exam: 100 Clinical (OSCE and CIVA): 150 Total: 250 |
| 8-List of References | |
| <ul style="list-style-type: none"> ● Course Notes/handouts | <ul style="list-style-type: none"> ● Staff members print out of lectures and/or CD copies |
| <ul style="list-style-type: none"> ● Recommended Text Books | Kanski's Clinical Ophthalmology: A systematic Approach, 9 th edition, Elsevier 2019 |

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



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

نموذج رقم (١١)

| | |
|--|-------------|
| الدوره الخاصه بتدريس ماده طب العيون لطلاب درجه الدكتوراه | مسمى المقرر |
| OO 100 MD | كود المقرر |

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

Matrix of Coverage of Course ILOs By Contents

| Intended Learning Outcomes (ILOs) | | | |
|-----------------------------------|------------------------|------------------------------------|----------------------------------|
| A. Knowledge & Understanding | B. Intellectual Skills | C. Professional & Practical skills | D. General & Transferable Skills |
| A | B | C | D |
| 1,2,3,4 | 1-4 | 1,2,3,6 | |
| 1,2,3,4 | 1-4 | 1,2,3,4,5 | 1 |
| 1,2,3,4,7 | 1-4 | 1,2,3,8 | |
| 1,2,3,4,6 | 1-4 | 1,2,3,7,10 | 1 |
| 1,2,3,4,5 | 1,3 | 1,2,3 | 1 |
| 1,2,3,4 | 1-4 | 1,2,3 | 1 |

| | | | |
|---------|-----|-------|---|
| 1,2,3,4 | 1,2 | 1,2,3 | 1 |
| 1,2,3,4 | 1-4 | 1,2,3 | 1 |
| 1,2,3,4 | 1-4 | 1,2,3 | 1 |
| 1,2,3,4 | 1-4 | 1,2,3 | 1 |

E- Matrix of Coverage of Course ILOs by 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 |
| | 1-2-3-4-5-6-7 | | | 1 |
| | | 1-2-3 | 1-2-3 | |
| ling | | 1-4 | 1-10 | |

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 |
| Final exam | 1-2-3-4-5-6-7 | | | |
| Mid-term | | 1,2,3 | 1-2-3 | 1 |
| Assignment | | 1-4 | 1,2,3 | 1 |
| Quiz | 1-2-3 | 1-2 | | |

**Blueprint of Postgraduate Ophthalmic medicine Course for MD degree
(2nd part) of Ophthalmology Department (Code: OO 100) (100 marks)**

| Topic | H ou rs | K no wl ed ge % | In tel lec tu al % | W eig ht % | Ac tu al M ar k | Modifie d mark |
|-------------------------------|------------------------|--|---|-------------------------------|--|---------------------------|
| 1. Cornea and sclera | 54 | 75 | 25 | 10 | 10 | 10 |
| 2. The eyelid | 54 | 75 | 25 | 10 | 10 | 10 |
| 3. Diseases of lens | 54 | 75 | 25 | 10 | 10 | 10 |
| 4. Uveitis | 54 | 75 | 25 | 10 | 10 | 10 |
| 5. Diseases of retina | 54 | 75 | 25 | 10 | 10 | 10 |
| 6. Orbital diseases | 54 | 75 | 25 | 10 | 10 | 10 |
| 7. Neuro-ophthalmology | 54 | 75 | 25 | 10 | 10 | 10 |
| 8. Glaucoma | 54 | 75 | 25 | 10 | 10 | 10 |
| 9. Conjunctiva | 54 | 75 | 25 | 10 | 10 | 10 |
| 10. Intraocular tumors | 54 | 75 | 25 | 10 | 10 | 10 |
| Total | 540 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof.Dr/ Ahmed Mohamed Kamal EL-Shafie

Course Specifications of Ophthalmic Surgery in MD degree in Ophthalmology

University: Minia

Faculty: Medicine

Department: Ophthalmology

| Course Information | | |
|---|--|---|
| <ul style="list-style-type: none">● Academic Year/level: Second part | <ul style="list-style-type: none">● Course Title: Ophthalmic surgery | <ul style="list-style-type: none">● Code: OO 100 |
| <ul style="list-style-type: none">● Number of teaching hours:<ul style="list-style-type: none">- Lectures: Total of 240 hours; 4 hours/week- Practical/clinical: Total of 300 hours; 5 hours/week | | |
| Overall Aims of the course | <i>By the end of the course the student must be able to:</i> 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. | |
| Intended learning outcomes of course (ILOs): <i>Upon completion of the course, the student should be able to:</i> | | |
| a. Knowledge and Understanding | A.1. Surgeries of: <ul style="list-style-type: none">● Lid● Anterior segment● Posterior segment | |

| | |
|-------------------------------|---|
| | <ul style="list-style-type: none"> ● orbit ● Squint ● Lacrimal - Probing - Plugs insertion - Intubation - Dacrocystorhinostomy - Dacrocystectomy <hr/> <ul style="list-style-type: none"> ● A.2. Mention the principles of : <ul style="list-style-type: none"> - Local anaesthesia - Sterilization <hr/> <ul style="list-style-type: none"> ● A.3. State update and evidence-based Knowledge of <ul style="list-style-type: none"> -Multiple injured patients <hr/> <ul style="list-style-type: none"> ● A.4. Memorize the facts and principles of the relevant basic and clinically supportive sciences related to ophthalmological Surgery. ● A.5. Mention the basic ethical and medicolegal principles relevant to the ophthalmological Surgery. ● A.6. Mention the basics of quality assurance to ensure good clinical care in ophthalmological Surgery. ● A.7. Mention the ethical and scientific principles of medical research <hr/> |
| b. Intellectual Skills | <ul style="list-style-type: none"> ● B.1. Correlates the facts of relevant basic and clinically supportive sciences with clinical reasoning, diagnosis and management of common diseases related to ophthalmological Surgery. ● B.2. Relate investigatory and analytic |

| | |
|---|--|
| | <p>thinking (problem solving) approaches to common clinical situations related to ophthalmological Surgery.</p> <ul style="list-style-type: none"> ● B.3.Design and present cases , seminars in common problem ● B.4.Formulate management plans and alternative decisions in different situations in the field of the ophthalmological Surgery. |
| c. Professional and Practical Skills | <p>C.1. Obtain proper history and examine patients in caring and respectful behaviours.</p> <p>C.2. Order the following non-invasive/invasive diagnostic procedures</p> <p>Basal laboratory investigation</p> <p>-C.T. and MRI orbit</p> <p>C.3. Interpret the following non-invasive/invasive diagnostic procedures</p> <p>-Basal laboratory investigation</p> <p>- C.T. and MRI orbit.</p> |

| | | | |
|------------------------------------|---|----------------------------------|----------------------------------|
| F- General and transferable Skills | <ul style="list-style-type: none">● D.1. Perform practice-based improvement activities using a systematic methodology (audit, logbook)● D.2. Appraises evidence from scientific studies (journal club)● D.3. Conduct epidemiological Studies and surveys● D.4. Perform data management including data entry and analysis.● D.5. Facilitate learning of junior students and other health care professionals. | | |
| | Course Contents | | |
| Topic | Lecture hours/week | Practical/Clinical hours/week | Total No. of hours hours/week |
| Lid Surgeries | 40 min | 1 hour | 2 hours |
| Cornea and refractive Surgeries | 40 min | 1 hour | 2 hours |
| Cataract and Glaucoma | 40 min | 1 hour | 2 hours |
| Posterior segment Surgeries | 40 min | 1 hour | 2 hours |
| Lacrimal surgery | 40 min | 1 hour | 2 hours |
| Orbital surgeries | 40 min | 1 hour | 2 hours |
| Teaching and Learning Methods | <ul style="list-style-type: none">● Didactic (lectures, seminars, tutorial)● Clinical rounds● Observation● Perform under supervision of senior staff● Simulations● Case presentation● Written & oral communications● Seminar | | |

| | |
|---|---|
| | |
| Teaching and Learning Methods for students with limited Capacity | <ul style="list-style-type: none"> ● Lectures ● Simulations |
| Student Assessment | |
| 1- Student Assessment Methods | a. Written and oral examination b. Surgical Examination: perform phaco cataract surgery c. Logbook |
| 2- Assessment Schedule (Timing of Each Method of Assessment) | 1-Assesment 1: written examination 2-Assessment 2: oral examination 3-Assessment 3: Surgical and CIVA 4- Logbook of attendance & absenteeism throughout the course |
| 3- Weighting of Each Method of Assessment | Paper based exam: 100 Surgical and CIVA: 150 Total: 250 |
| List of References | |
| <ul style="list-style-type: none"> ● Course Notes/handouts | <ul style="list-style-type: none"> ● Staff members print out of lectures and/or CD copies |
| <ul style="list-style-type: none"> ● Recommended Textbooks | Ophthalmic Surgery, Principles and Practice, George L Spaeth, 4 th edition |

Head of Department: -

- Prof. Dr. Ahmed Mohamed Kamal El-Shafie



Date of last update & approval by department Council:

5/ 3 / 2023

نموذج رقم (١١)

| | |
|--|-------------|
| الدوره الخاصه بتدريس ماده جراحة العين لطلاب درجه الدكتوراه | مسمى المقرر |
| OO 100 | كود المقرر |

.....: المنيا
: الطب البشرى
: طب و جراحة العين

A-Matrix of Coverage of Course ILOs By Contents

| Contents (List of course topics) | Intended Learning Outcomes (ILOs) | | | |
|--|-----------------------------------|------------------------|---------------------------------------|-------------------------------------|
| | A. Knowledge & Understanding | B. Intellectual Skills | C. Professional & Practical skills | D. General & Transferable Skills |
| | A | B | C | D |
| -Lid Surgeries | 1-5 | 4 | 1-3 | 1-3 |

| | | | | |
|-----------------------------|------------|------------|------------|----------|
| | | | | |
| Refractive surgeries | 1-7 | 4 | 2 | |
| Posterior segment Surgeries | 1-7 | 4 | 2 | 5 |
| orbit Surgeries | 1-5 | 1-4 | 2 | 4 |
| Cataract and glaucoma | 1-5 | 4 | 2 | |
| Lacrimal surgeries | 1-5 | 4 | 1-3 | |

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 | 1-2-3-4-5-6-7 | B1-2-3-4 | | |
| Practical | | | | |
| Clinical (Including grand rounds) | | 1-2-3-4 | 1-3 | |
| Presentation/seminar | | | | 1-5 |

| | | | | |
|---|------------|------------|------------|------------|
| Training courses & workshops | 1-7 | 1-4 | 1-3 | 1-5 |
|---|------------|------------|------------|------------|

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 |
| Paper based exam | 1-2-3-4-5-6-7 | | | |
| Surgical exam | | 1-2 | 1-2 | |
| CIVA exam | 1-5 | 1,2,3,4 | 1-3 | |
| Oral Exam | 1-3 | 1-5 | | |

Blueprint of Postgraduate Ophthalmic medicine Course for MD degree
(2nd part) of Ophthalmology Department (Code: OO 100) (100 marks)

| Topic | H ou rs | K no wl ed ge % | Su rgi cal ski lls % | W eig ht % | Ac tu al M ar k | Modifie d mark |
|--------------------------|---------------|--------------------------------|-------------------------------------|---------------------|--------------------------------|-------------------|
| 1. Lid surgeries | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| 2. Cornea and refractive | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| 3. cataract and glaucoma | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| 4. Posterior segment | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| 5. Lacrimal surgeries | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| 6. Orbital Surgeries | 90 | 50 | 50 | 16.6 | 16.6 | 16.6 |
| Total | 540 | | | 100% | 100 | |

Head of Ophthalmology department:

Prof. Dr/ Ahmed Mohamed Kamal EL-Shafie

