



جمهورية مصر العربية

وزارة التعليم العالي
الوزيرة

قرار وزاري

رقم (٧٤٧) بتاريخ ٢٠٢٢/٣/١٤

بشأن تعديل اللائحة الداخلية لكلية الطب جامعة المنصورة

(مرحلة الدراسات العليا) بنظام الساعات المعتمدة

وزير التعليم العالي والبحث العلمي ورئيس المجلس الأعلى للجامعات

* بعد الاطلاع على القانون رقم ٤٩ لسنة ١٩٧٢ في شأن تنظيم الجامعات والقوانين المعدلة له.
* وعلى قرار رئيس الجمهورية رقم ٨٠٩ لسنة ١٩٧٥ بإصدار اللائحة التنفيذية لقانون تنظيم الجامعات والقرارات المعدلة له.

* وعلى القرار الوزاري (٦٩٤) بتاريخ ٢٠١١/٤/٣ بشأن إصدار اللائحة الداخلية لكلية الطب جامعة المنصورة (مرحلة الدراسات العليا) بنظام الساعات المعتمدة، والقرارات المعدلة له.

* وعلى موافقة مجلس جامعة المنصورة بجلسته بتاريخ ٢٠٢٠/٧/٢٧، ٢٠٢١/٨/٢٠

* وعلى موافقة لجنة قطاع الدراسات الطبية بجلستها بتاريخ ٢٠٢١/١١/٨، ٢٠٢١/١٢/٢٧

* وعلى موافقة المجلس الأعلى للجامعات بجلسته بتاريخ ٢٠٢٢/٢/١٧

قرر
(المادة الأولى)

يضاف مادة جديدة تحت رقم (٣ مكرر) إلى اللائحة الداخلية لكلية الطب جامعة المنصورة مرحلة الدراسات العليا (نظام الساعات المعتمدة) الصادرة بالقرار الوزاري رقم (٦٩٤) بتاريخ ٢٠١١/٤/٣ على النحو التالي:

مادة (٣ مكرر) الدبلومات المهنية
تمنح جامعة المنصورة بناء على طلب كلية الطب البشري الدبلومات المهنية الآتية:-

- ١-
- ٢-
- ٣- مكافحة العدوي
- ٤- أمراض الأوعية الدموية المخية والسكتة الدماغية
- ٥- التغذية الإكلينيكية
- ٦- زراعة نخاع العظام
- ٧- مجال طب الشبكية

(المادة الثانية)

يلحق باللائحة الداخلية المشار إليها بعالية الخطة الدراسية والإمتحانية المرفقة والخاصة بالدبلومات المهنية الآتية (مكافحة العدوي - أمراض الأوعية الدموية المخية والسكتة الدماغية - التغذية الإكلينيكية - زراعة نخاع العظام - مجال طب الشبكية)

(المادة الثالثة)

على جميع الجهات المختصة تنفيذ هذا القرار.

وزير التعليم العالي والبحث العلمي
ورئيس المجلس الأعلى للجامعات

(أ.د/ خالد عبد الغفار)



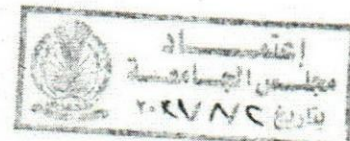
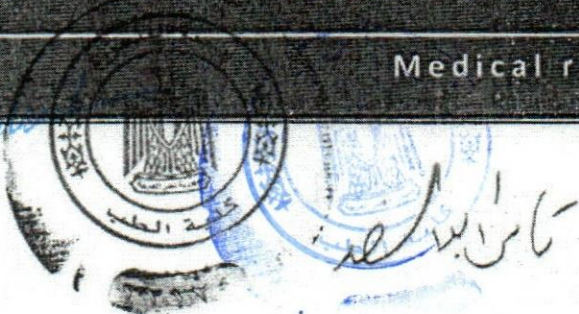
محرر

Medical Retina

Professional diploma

2021

Medical retina unit





COURSE SPECIFICATION

Postgraduate Professional Diploma Degree of Medical retina
Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	Diploma of Medical retina
(2) Department offering the programme:	Ophthalmology Department
(3) Department responsible for teaching the course:	Medical retina Unit
(4) Parts of the programme:	3 semesters in 18 months
(5) Date of approval by the Department's council	
(6) Date of last approval of programme specification by Faculty council	
(7) Course title:	Medical retina
(8) Course code:	
(9) Total teaching hours:	60 lectures-120 practical
(10) Credit hours:	10
(11) Course Coordinator:	Prof. Maha Shahin

2. Entry requirements

Entry to medical retina training requires per minimum the following qualifications: Post-graduate master degree in Ophthalmology or an Egyptian Fellowship of Ophthalmology or Egyptian Board of Ophthalmology or equivalent degree.



(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

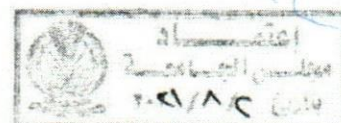
The broad aims of the course are to provide the candidate with

1. Medical knowledge and skills essential for the medical management of various vitreoretinal disease efficiently and properly according to the international standards
2. Skills necessary for proper diagnosis and management of patients with vitreoretinal diseases including diagnostic, problem solving, decision making, treatment plan and different lines of treatment.
3. Ethical principles related to the practice in this specialty.
4. Maintenance of abilities necessary for continuous medical education.

Tamer Abachou



تامر أباشو



(2) Intended Learning Outcomes (ILOs):

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

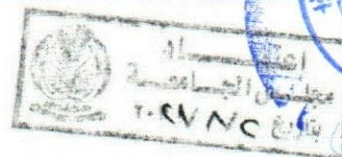
On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A1. Identify the anatomy, physiology and pathophysiology of the retina, with emphasis on the macula.
- A2. Recognize risk factors and differential diagnosis of disorders of retinal and macular pathology
- A3. Classify diabetic retinal disease, vascular retinopathies, retinal inflammations, retinal oncology, hereditary and degenerative retinopathies.
- A4. Recognize acute retinal pathology and their proper management.
- A5. Identify current guidelines for treatment of medical retinal disorders



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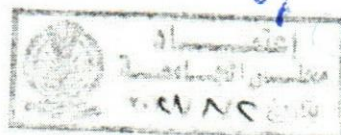


B- Intellectual skills

- B1. Correlate clinical information with angiographic, topographic, field, ultrasound and electrophysiological changes.
- B2. Evaluate the use of Electrophysiological, field changes and ultrasonography in diagnosis of medical retinal diseases
- B3. Interpret of OCT images and fundus photographs in retinal medical disorders.
- B4. Evaluate the use of fluorescein, ICG angiography and fundus autofluorescence in medical retina service delivery.
- B5. Interpret the OCT, OCTA, fundus fluorescein angiography, fundus autofluorescence findings properly.
- B6. Design treatment for patients with medical retinal disorders.
- B7. Evaluate of the rapidly evolving medical retina treatments including laser, intravitreal injections, photodynamic therapy and cryotherapy.

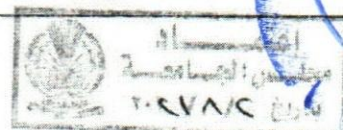


تاريخ



C- Professional/practical skills

- C1. Use FFA, OCT, OCTA, ERG and ultrasonography efficiently.
- C2. Treat medical retinal disease according to evidence- based guidelines.
- C3. Use in laser therapy of medical retinal conditions efficiently.
- C4. Inject intraocular & periocular injections properly and safely when indicated.
- C5. Deal efficiently with complications of periocular and intraocular injections.



D- Communication & Transferable skills:

- D1. Demonstrate compassion, integrity, and respect for all human rights and treat all patients equally regardless to their beliefs, culture and behavior.
- D2. Educate patients about the rationale, technique, and complications of procedures used in treatment of medical retinal disorders.
- D3. Communicate effectively with patients, families, and the public.
- D4. Communicate effectively with physicians, other health professionals, and health- related agencies.
- D5. Apply safety measures during practice.
- D6. Apply infection control measures during practice
- D7. Maintain comprehensive, timely and legible medical records.

Academic Reference:

- 1) NARS 2009
- 2) ICO 2012



Intended Learning outcome of each semester:

Semester I:

A- Knowledge and Understanding:

- 1- Identify normal retinal anatomy and development including the macular area.
- 2- Recognize the important physiological mechanisms regulating retinal functions
- 3- Identify microorganisms affecting the retina
- 4- Define the concept of evidence based medicine and apply it to retinal disease
- 5- Understand pathological mechanism of hereditary retinal disorders
- 6- Distinguish pathology of retinal vascular diseases
- 7- Recognize basic of immunological disorders and apply them to retinal diseases
- 8- Identify common systemic diseases affecting the retina and their treatment
- 9- Identify different modes of inheritance and apply them to retinal diseases
- 10- Classify different intravitreal injectable medications
- 11- Recognize different low vision aids and their importance to patients with retinal problems
- 12- Navigate the net for current best evidence in literature

B- Intellectual Skills:

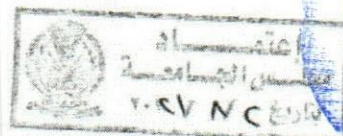
- 1- Correlate pathophysiology with clinical findings.
- 2- Estimate the value of drugs used in treatment of retinal disease and their indications
- 3- Recognize the necessary investigation in different retinal diseases
- 4- Select the appropriate treatment plan for each patient using evidence based medicine.
- 5- Conclude inheritance pattern of different retinal disease.
- 6- Select the appropriate visual aid for different patients
- 7- Discriminate between different pathophysiological retinal diseases.
- 8- Plan the individualized investigational plan.

C- Professional and practical skills:

- 1- Conduct proper examination for each patient.
- 2- Examine visually disabled patients efficiently.
- 3- Prescribe the best visual aid for each patient.

D-Communication and transferable skills

- 1- Demonstrate compassion, integrity, and respect for all human rights and treat all patients equally regardless to their beliefs, culture and behavior.
- 2- Communicate effectively with patients, families, and the public.
- 3- Communicate effectively with physicians, other health professionals, and health-related agencies.
- 4- Maintain comprehensive, timely and legible medical records.



Semester II:

A- Knowledge and Understanding:

- 1- Recognize phases of fluorescein and ICG angiography
- 2- Identify abnormal fluorescence and their causes.
- 3- Distinguish different layers of the retina on OCT and OCTA.
- 4- Recognize OCT & OCTA abnormalities.
- 5- Understand basics of retinal autofluorescence
- 6- Recognize ERG and EOG changes and their diagnostic importance
- 7- Identify uses of ultrasonography in diagnosing of retinal disease.
- 8- Distinguish heritable retinal disease.
- 9- Recognize diagnostic features of retinal dystrophy
- 10- Identify common acquired macular diseases and their diagnostic criteria
- 11- Distinguish between different retinal vascular diseases
- 12- Recognize choroidal and retinal tumours
- 13- Identify diagnostic features of posterior uveitis

B- Intellectual Skills:

- 1- Correlate clinical findings with signs of retinal disease.
- 2- Estimate the value of each investigation in management of retinal disease.
- 3- Plan the needed investigation for each patient
- 4- Select the appropriate investigation for each patient.
- 5- Formulate a differential diagnosis and an appropriate plan of investigation for a patient with retinal disease.
- 6- Interpret of FFA and ICG findings.
- 7- Interpret OCT and OCTA findings.
- 8- Interpret retinal changes in A & B scan ocular ultrasound.
- 9- Interpret Electroretinogram changes.

C- Professional and practical skills:

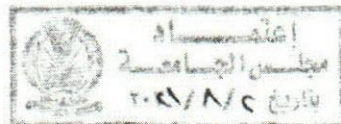
- 1- Use FFA and ICG.
- 2- Use OCT and OCTA findings.
- 3- Use retinal autofluorescence changes
- 4- Use electrophysiological and VEP to diagnose retinal diseases.
- 5- Use A and B scans ocular ultrasound to examine the vitreous and retina.
- 6- Exam patients with retinal disorders

D-Communication and transferable skills

- 1- Demonstrate compassion, integrity, and respect for all human rights and treat all patients equally regardless to their beliefs, culture and behavior.
- 2- Communicate effectively with patients, families, and the public.
- 3- Communicate effectively with physicians, other health professionals, and health-related agencies.
- 4- Maintain comprehensive, timely and legible medical records.



Tamer Abdelsad



Semester III:

A- Knowledge and Understanding:

- 1- Recognize principle of laser treatment
- 2- Identify indications and application of retinal cryotherapy
- 3- Recognize indications of different injectable intravitreal drugs
- 4- Distinguish between different protocols for intravitreal injections
- 5- Understand basics and indications of retinal photodynamic therapy
- 6- Identify principles and use of transpupillary thermotherapy in retinal disease
- 7- Identify treatment protocols of different stages of diabetic retinopathy
- 8- Distinguish treatment plans of different retinal vascular disorders
- 9- Recognize treatment options of heritable and degenerative retinal diseases
- 10- Identify management of common acquired macular diseases.
- 11- Distinguish treatment options of different stages of choroidal and retinal tumours
- 12- Recognize treatment plans of vascular retinal diseases.
- 13- Identify treatment modalities of posterior uveitis

B- Intellectual Skills:

- 1- Formulate an appropriate management plan for a patient with retinal disease.
- 2- Recognize the limitation of medical treatment of retinal diseases
- 3- Asses the retinal conditions that necessitate vitrectomy.
- 4- Organize the screening and investigations required to detect diabetic retinopathy

C- Professional and practical skills:

- 1- Perform laser and cryo retinal treatment
- 2- Perform intravitreal injection
- 3- Conduct patient customized treatment protocol
- 4- Evaluate success of treatment and modulate it accordingly.
- 4- Provide long term care for patients with retinal diseases
- 5- Apply safety and infection control measures during practice
- 6- Manage underlying causes of retinal diseases

D-Communication and transferable skills

- 1- Demonstrate compassion, integrity, and respect for all human rights and treat all patients equally regardless to their beliefs, culture and behavior.
- 2- Communicate effectively with patients, families, and the public.
- 3- Communicate effectively with physicians, other health professionals, and health-related agencies.
- 4- Maintain comprehensive, timely and legible medical records.

كارين عبد الله



(3) Course contents:

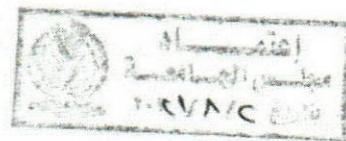
Semester I: Basics of retinal diseases (anatomy, physiology, pathology, immunology)

Semester II: Diagnosis of Medical retinal disorders.

Semester III: Treatment and guidelines for medical retinal disorders.

Subjects	Code	Lectures	Clinical	Seminars/ Case discussion	Total Teaching Hours
[I] Semester I:					
(1) Retinal anatomy & physiology		2	1X 2	1	5
(2) Microorganisms affecting retina & choroid		2	1X 2	1	5
(3) Evidence based medicine		2	-	1	3
(4) Pathophysiology of degenerative retinal diseases		2	2X2	1	7
(5) Pathophysiology of retinal vascular diseases		2	2x2	1	7
(6) Immunological aspects of chorioretinal diseases		2	2x2	1	7
(7) Basics of systemic disease affecting retina		2	2x2	1	7
(8) Basics of ocular genetics		2	1x2	1	5
(9) Pharmacological aspects of intravitreal medications		2	2x2	1	7
(10) Introduction to low vision aids		2	2x2	1	7
Logbook activities including clinical examinations, seminars, conferences, and cases presentations					
[II] Semester II:					
(1) Basics of FFA & ICG interpretation		2	1x3	1	6
(2) Basics of OCT interpretation		2	2x3	1	9
(3) Basics of autofluorescence interpretation		2	-	1	3
(4) Basics of ERG & ultrasound interpretation		2	1x3	1	6
(5) Diagnosis of Hereditary retinal diseases		2	1x3	1	6
(6) Diagnosis of Retinal dystrophy		2	1x3	1	6
(7) Diagnosis of acquired macular disease		2	1x3	1	6
(8) Diagnosis of retinal vascular diseases		2	1x3	1	6
(9) Diagnosis of retinal & choroidal tumours		2	1x3	1	6
(10) Diagnosis of Posterior uveitis		2	1x3	1	6
Logbook activities including clinical examinations, seminars, conferences, and cases presentations					
III. Semester III:					
(1) laser & cryo treatment		2	1x3	1	6
(2) Intravitreal injection		2	1x3	1	6
(3) Photodynamic therapy		2	-	1	3
(4) Transpupillary thermotherapy		2	-	1	3
(5) Protocols of treatment of Diabetic retinopathy		2	2x3	1	9
(6) Treatment of retinal vascular diseases		2	2x3	1	9
(7) Treatment of inherited & degenerative retinal diseases		2	1x3	1	6
(8) Treatment of acquired macular disorders		2	1x3	1	6
(9) Treatment of posterior uveitis		2	1x3	1	6
(10) Treatment of retinal & choroidal tumors		2	1x3	1	6
Logbook activities including clinical examinations, seminars, conferences, and cases presentations					

Tamer Abdelsamir



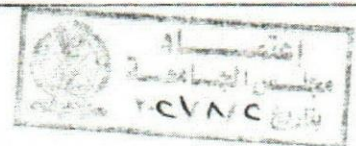
4. Program ILOS Matrix:

Program ILOs are enlisted in the first row of the table (by their code number a1, a2, a3,.....) then the program topics are enlisted in the first column. An "x" mark is inserted where the respective topic contributes to the achievement of the program ILOS in Question.

Topic	A	A	A	A	A	B	B	B	B	B	B	B	C	C	C	C	C	D	D	D	D	D	D	D	
	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5	1	2	3	4	5	6	7	
Semester 1	x	x			x			x				x	x		x		x	x	x	x	x	x	x	x	
Semester 2			x	x	x		X	x	x	X	X			X					x		x	X	X	X	
Semester 3					x	x							X	X		X	X	x	x	X	x	X	X	x	X

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Turner Abachsaad



5. Program Regulations:

During the entire training program, the candidate must be dedicated and fully responsible for patient care under supervision of fellowship trainers.

Trainees Duties and obligations

5.1- The trainees should attend and participate. Attendance and participation should not be less than 75% of the total number of activities within any training rotation / period including:

5.1.1. Medical retina clinics

5.1.2.. Clinical round presentation, at least once weekly to cover various topics, problems or research.

5.1.3. Journal club meeting.

5.1.4. Interdepartmental meetings/ morbidity and mortality meetings.

5.1.5. Grand staff rounds.

5.2. Trainees should be actively involved and fully responsible for patient care including sharing in making decisions about diagnosis and management under supervision of the consultants.

5.3. Trainees should be responsible (under supervision) for outpatient routine work.

Tamer Abachwan

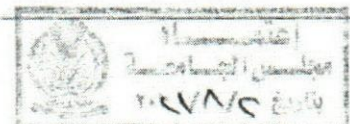


جامعة المنصورة
كلية الطب



جامعة المنصورة
كلية الطب

تاريخ: ٢٠٢٤/٠٥/٠٥



5.4. Trainees must take supervised shifts according to the hospitals requirements and regulations.

5.5. Trainees should be responsible for supervised admission of the patients from the OPD or the ER.

5.6. Trainees should share in the completion of the following documents under supervision.

5.6.1- Complete history and physical examination form.

5.6.2- Investigation requests, (laboratory, radiology, pathology, etc.).

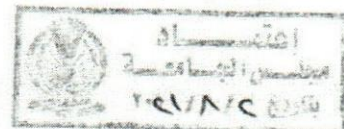
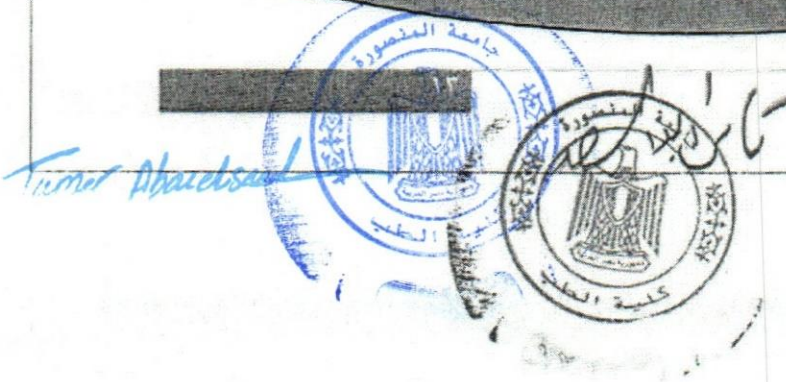
5.6.3- Reporting results of the investigations

5.6.4- The plan of management after consultation and approval from supervisors

5.6.5- Discussion of the case with the trainer and consultants

5.6.6. Sick leaves and medical reports

If the candidate does not comply with these regulations, he will be sent a warning. If a candidate gets 3 warnings, he will be dismissed from the program.



6. Teaching methods:

- 6.1. Lectures.
- 6.2: Clinical training
- 6.3: Case discussion.
- 6.4: Clinical seminar
- 6.5: E- learning
- 6.6: Self learning

7. Assessment methods:

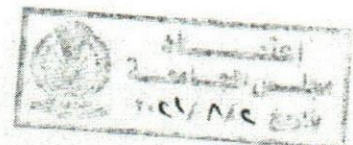
- 7.1: Written exam for assessment of knowledge, intellectual skills
 - 7.2: Structural Oral exam for assessment of knowledge, intellectual skills
 - 7.3: Clinical exam (OSCE) for assessment of knowledge, intellectual and practical skills.....etc)
 - 7.4: MCQ exam continuous assessment
- (The student will be transferred from one semester to the next whatever the score then to the final exam)

Assessment schedule: At end of each semester (300 marks, 100 marks for each semester) followed by the final exam (1000 marks). The total is 1300 marks.

Total	Marks				
	Clinical	Oral	MCQ	Written	
100	10		30	60	First Semester
100	30		30	40	Second Semester
100	30		30	40	Third Semester

If the candidate fails to pass the exam, he can join the next semester, but he will not be able to sit for the final exam unless he passes the 3 end of semester exams.

Tamer Abdou



Final Exam

Total	Marks				Diploma of medical retina
	Clinical	Oral	MCQ	Written	
1000	300	150	200	350	

كارين عبد الله

الجامعة السورية
كلية الطب
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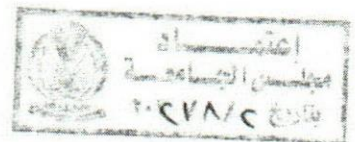


8. References of the course:

- 8.1- Stephan Ryan: Retina
- 8.2- Kanski: Clinical Ophthalmology A Systematic Approach
- 8.3- Ophthalmology by Yanoff
- 8.4- Gass Atlas of macular diseases
- 8.5- American Academy of Ophthalmology series

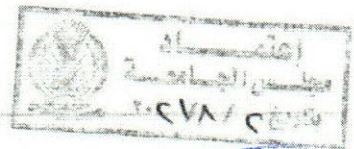
Periodicals:

- Journal of Retina and vitreous
- IOVS
- AJO
- BJO
- Ophthalmology



9. Facilities and resources mandatory for course completion:

- 9.1- Lecture Halls.
- 9.2- Data show.
- 9.3- Medical retina clinics.
- 9.4- Investigative ophthalmology rooms equipped with OCT, FA, ERG, and ultrasound
- 9.5- Laser unit
- 9.6- Operating room for intravitreal injection
- 9.7- Librarary
- 9.8- Facilities for tutors:
 - * Computers and high speed internet connection.
 - * International databases.



Fumar Abdelaziz

