



Master Degree OPH226A COURSE SPECIFICATION

(Anatomy and embryology of the Eye)

Faculty of Medicine- Aswan University

(A) Administrative information

| (1) Programme offering the course: | Master degree of Ophthalmology programme | | |
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| (2) Department offering the programme: | Ophthalmology department | | |
| (3) Department responsible for teaching the course: | OPhthalmology department | | |
| (4) Part of the programme: | Master degree of Ophthalmology programme 1st part | | |
| (5) Course title: | Anatomy and Embryology of the eye | | |
| (6) Credit hours | 10 | | |
| (7) Total teaching hours: | 15 hours | | |

(B) **Professional information**

(1) Course Aims:

The broad aim of the course is to educate students about Anatomy of the Eye also to provide the students with updated data and researches concerned the eye, adnexae and nervous system,

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(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

| A1 | Describe the normal anatomy, embryologic development, physiology, and | |
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| | biochemistry of the crystalline lens. | |
| A2 | Describe the basic structure of the retina and its relationship to the vitreous and | |
| | choroids. | |
| A3 | Describe the anatomy of the cornea& conjunctiva. | |
| A4 | Appraise the anatomy of iris &pupil. | |
| A5 | Define the anatomy of the vascular system . | |
| A6 | Describe the normal anatomy and function of orbital and periocular tissues. | |
| A7 | Outline the anatomy of the extraocular muscles and their fascia. | |
| A8 | Outline the anatomy of ciliary body & trabecular meshwork. | |
| A9 | Appraise the anatomy of the visual pathway in order to localize lesions | |

B- Intellectual skills

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|------------|---|--|
| I 1 | Identify congenital anomalies of the lens. | |
| I2 | Summarize the developmental alterations that lead to structural changes of the cornea | |
| I3 | Correlate clinical and pathologic findings that differentiate intraocular tumors. | |
| I4 | Review anatomy of other cranial nerves. | |
| I5 | Correlate the physiology and neuro-anatomy of the pupil, cranial nerves, and the visual | |
| | sensory and ocular motor pathways. | |
| I6 | Interpret the most important anatomic land marks | |
| I7 | Correlate the surgical anatomy of his clinical practice. | |
| I8 | Integrate the anatomy with other basic and clinical sciences. | |

(3) Course content:

| Date | Title | Teaching |
|------|--|-------------------|
| | | hours (15) |
| | Embryology & Development, Anatomy, Histology & Cytology. | 1 |
| | Outer coat: Cornea, Limbus. & Sclera. | 1 |
| | Middle coat: Choroid, Ciliary body& Iris. | 1 |
| | Inner coat: Retina. | 1 |
| | Contents: Lens & Vitreous. | 1 |
| | Eyelids & Eye brow. Conjunctiva, Conjuntival glands, caruncle, plica semilunaris. Lacrimal gland. Lacrimal puncta, canaliculi, sac. & Nasolacrimal duct. Extra Ocular Muscles: Recti & Oblique. Orbit, Paranasal sinuses, Fascia, fat & nerves (Oculomotor, Trochlear, Trigeminal, Abducent, Facial, & Auditory). Arterial supply, Venous Drainage :(Ophthalmic artery & branches, Ophthalmic vein & tributaries) & Lymph drainage. | 6 |
| | 4) Visual pathway: Optic nerve, optic chiasma, optic tract, Lateral Geniculate Nucleus, optic radiations, occipital cortex, Blood supply. | 2 |
| | 5) Autonomic nervous system: Sympathetic & Parasympathetic. | 2 |

(4) Teaching methods:

- **4.1**: Lecture
- **4.2:** Practical class
- **4.3:** Small group discussion with case study and problem solving

(5) Assessment methods:

- **5.1: Written Examination for assessment of** ILOs knowledge & intellectual.
- 5.2: Oral examination
- **5.3: Practical examination**
- **5.4: MCQ examination**

Assessment schedule:

Assessment 1: written after 1 year from master registration

Assessment 2: Oral exam 1 year from master registration

Assessment 3: MCQ exam for continuous assessment of knowledge and intellectual skills at the end of the semester after 15 weeks

<u>Assessment 4</u> Log book required activities to go through 1st part examination.

Percentage of each Assessment to the total mark:

Written exam: 75 Marks including 20% MCQ

Oral exam 75 Marks