

Ophthalmology Curriculum

PREPARED BY

SCIENTIFIC COUNCIL FOR OPHTHALMOLOGY



Curriculum for Ophthalmology

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Introduction:

This program is our hope that we are eager for succeed in its implementation, although it is an optimistic program, but it is practical and not impossible to achieve. With the cooperation of universities, scientific institutes and health ministries and secretariats, it will be possible to get the best and provide a lot of effort and expenses that is destroyed by sending our students outside our countries.

This guide is designed to detail the study programs of lectures, seminars, meetings and clinical courses given to the Intern, as well as to involve the Interns in obtaining the required information through question and answer, discussions, instilling the spirit of participation and initiative, deepening and improving the ways of thinking to solve the medical problems faced by the specialist in medical surgical sciences. Logical thinking is the basis of education and the foundation of the principle that medical education is lifelong learning does not stop at a certain limit or age. Surgical science does not know stop, the person stopped in place is daily delayed proportionally in comparison with others progress.

Internship Objectives

- 1. Enabling the graduate to obtain sufficient and basic information for the science of surgery and applied medical information in the field of ophthalmology (causes and treatment with the ability to research and implementation).
- 2. Enabling the graduate to take the right position required to qualify him to take responsibility as a specialist in ophthalmology when dealing with patients and with medical and health staff.
- 3. Encouraging the graduate to self-follow-up of continuing medical education in the field of ophthalmology and scientific research.
- 4. Enable the Intern doctor to obtain sufficient clinical information to develop the ability to make correct therapeutic and surgical decisions while working as a specialist in the field of ophthalmology.
- 5. Enabling the graduate to acquire the ethics of the profession and proper professional behavior with knowledge of the forensic foundations related to his area.
- 6. Enabling the graduate to acquire sufficient surgical skill for his work as a specialist in ophthalmology accurately and safely.
- 7. Rehabilitation of the graduate to find out the causes of the spread of eye diseases in the environment in which he/she live (preventive and community medicine), the causes of blindness and ways to combat or



prevent them.

Entry Requirements

The conditions that must be met for the applicant to obtain a certificate of specialization in ophthalmology:

- 1. The applicant must have license in medicine and surgery from a recognized university.
- 2. To be familiar with Arabic language
- 3. To be accepted to study in the specialization in his country.
- 4. The applicant should be fluent in Arabic.
- 5. He/she should have a certificate of license in medicine from a recognized university.
- 6. Registration in the Syrian Board of Medical Specialties.

Internship

The internship should be in practical and scientific centers recognized by the Scientific Council for Ophthalmology, and by SBOMS. It shall issue an annual publication of the names of recognized centers.

Internship Duration



The period of practical internship lasts for four years as a resident doctor in one of the centers or hospitals recognized by the Council. The following curriculum is the minimum of information and theoretical and practical experience. This comprehensive and integrated internship program requires coverage of the following points:

- 1- The duration of the internship is 4 years as a resident doctor with practical internship.
- 2- Training in ophthalmic nerves medicine.
- 3- Participate in the surgeries during the four years.
- 4- Training in optics and studying and correcting refractive errors.

Internship Requirements

Internship requirements in the first year

- 1- Retinal examination in detail.
- 2- Corneal examination and conduct accurate studies.
- 3- Examination and determination of refractive error.
- 4- Study the visual field.
- 5- Examination of sight strength for all ages.
- 6- Checking and detecting color blindness.
- 7- Studying the angels of the anterior chamber of eyeball.



- 8- Retinal examination with Three-mirror lens.
- 9- Studying the tear secretions of the eye.
- 10- Studying the tear ducts of the eye.
- 11- Methods of studying the pressure of the eyeball.
- 12- Thorough and accurate knowledge of the examination by slit lamp.

Clinical experience:

- 1- Study and preparation of the patient when entering the hospital
- 2- Study and preparation of the patient before and after surgery
- 3- Familiarity with the types of catgut and the use of surgical microscope

Surgical experience:

- 1. Treatment of incised wounds of the eyelids
- 2. Sebaceous cysts
- 3. Samples of conjunctiva
- 4. Treatment of conjunctivitis wounds
- 5. Suture wounds of conjunctiva
- 6. Injection of drugs in the conjunctiva
- 7. Dacryocystorhinotomy
- 8. Cryotherapy
- 9. Eyelids Suture
- 10. Entropion and Ectropion surgeries



11. Treatment of trichiasis

- Experience in follow-up cases after surgery
- Gain experience in the treatment of eye accidents
- Gain experience in the treatment of common eye diseases

Internship requirements in the second year

- 1. Gain experience in the treatment of:
 - A. Anterior segment of the eye.
 - B. Ophthalmology and eye nerves.
 - C. Glaucoma.
- 2. Treatment of the common cases of diseases of the anterior segment of the eye and Glaucoma.
- 3. Perform regular strabismus, cataract and glaucoma surgeries under supervision of the instructor.
- 4. Treatment of eye injuries.
- Treatment of complications of surgeries of anterior segment of the eye.
- 6- Conducting an analytical study as a scientific research to be submitted to a scientific meeting for publication.
- 7- Participation, research and exploration in the field of preventive medicine in Ophthalmology.
- 8- Training in eye neurology.

Internship requirements in the third year



- 1- Acquire experience of treatment of the anterior segment of the eye.
- 2- Treatment of retinal diseases.
- 3- Diagnosis and treatment of all types of eye accidents and emergencies.
- 4- Study and conclusion of examinations results of eye angiography, optic nerve electrography and ultrasound.
- 5- Use of all kinds of laser.
- 6- Be able to perform surgeries of anterior segment of the eye.
- 7- Assist in the complex surgeries of the retina.
- 8- Conducting a scientific research or comprehensive scientific review of one of the problematic scientific subjects in the field of ophthalmology.
- 9- Contribute to health education by lecturing and others.
- 10- Familiarity with the methods of conducting scientific research and the method of investigating scientific references and the use of computers in research and investigation.
- 11- Preventive ophthalmology, the method of investigating epidemiological and genetic diseases in the field of ophthalmology and methods of obtaining field statistics.

Internship requirements in the fourth year

- 1- Participation in teaching students of previous years
- 2- To be able to conduct complex surgeries, hyaloid body surgeries and



- correction of refractive errors.
- 3- Taking responsibility for coordination of scientific seminars within the department or in cooperation with other departments.
- 4- Taking responsibility for management of scientific seminars.
- 5- Participate and be able to conduct scientific research in the field of specialization
- 6- The ability to use and operate complex devices to conduct accurate studies of eye diseases.

Internship supervisors in internship centers

Qualifications of the internship supervisor:

- 1. Has the highest degree of specialization certificate in ophthalmology.
- 2. Has experience in the field of work and specialization not less than five years after receiving the scientific qualification.

Duties of the supervisor of internship:

- 1- Periodic and continuous evaluation of the Intern by scientific supervision and written exams.
- 2- Ensuring increased responsibility for the Intern according to his qualifications and years of internship.
- 3- Arrange the scientific activities of the Intern and work on documenting it in his / her log book.
- 4- Creating the appropriate scientific environment for the Intern through inviting the local and international experts, inviting and organizing the scientific activities and intensive refresher courses for the Interns in the specialization.
- 5- Supervising the programs conduct by Interns and following up their work.
- 6- Send a copy of the log book to the internship committee at the end of each internship year.



7- Submit an annual report to the Board's Internship Committee for Ophthalmology.

Instructor qualities:

- 1- The instructor must be a specialist with the highest academic qualifications with experience of not less than 5 years.
- 2- The instructor must be a full-time to work in the field of specialization.

Instructor commitments:

- 1- Periodic and continuous evaluation of the intern by scientific supervision and written exams.
- 2- Ensuring increased responsibility for the intern according to his qualifications and years of internship.
- 3- Arrange the scientific activities of the intern and work to document it daily in the log book.
- 4- To be accountable to the program supervisor for the implementation of the above.
- 5- His responsibilities shall not exceed the internship and follow-up of four interns.

Exams

The initial exam

Admission requirements:

- 1- Fluent in Arabic.
- at a recognized center in line with the internship requirements specified by the Syrian Board for Medical Specialties. In the event that the applicant is not enrolled in the program, he must have completed four years of internship in a recognized center, each case should be studied separately.
- 3 Be evaluated by the supervisor of internship satisfactorily.
- 4 To submit a detailed statement of the number and type of surgeries, procedures and examinations he has made in the field of ophthalmology (Log Book).
- 5- Preferably to have conducted scientific or clinical research, or participated or reviewed a subject in ophthalmology and surgery.
- 6- He has passed at least the preliminary exam at a previous time.



Exam format:

The initial exam consists of 120 MCQ questions. The intern is mainly examined in basic sciences that includes:

- Anatomy and General Physiology
- Biochemistry, Pathology and Genetics
- Congenital malformations, pharmacology and pharmacognosy
- Optics and refractive errors
- Applied science in ophthalmology, experience in the use of devices, methods of examination and surgeries as well as clinical experience in the first two years of internship.

Final written exam

Conditions for the final written examination:

- 1- Fluent in Arabic.
- 2- The applicant must have completed four years of internship at a recognized center in line with the internship requirements specified by the Syrian Authority for Specializations.
- 3- Be evaluated by the supervisor of internship satisfactorily.
- 4- To submit a detailed disclosure of the number and type of procedures, procedures and statements he has made in the field of ophthalmology and surgery (Log Book).
- 5- Preferably to have conducted scientific research or clinical or participated or see a subject in ophthalmology and surgery.



6- He has passed the preliminary examination at least a previous session.

Form of written final exam

- One-page written test containing 180 MCQ questions.
- Questions are examining the Intern mainly in applied science and focuses
 on the experience gained in the four years of internship, including
 clinical experience and surgeries and includes all specialties in
 ophthalmology.
- Exam duration: three and a half hours.

Clinical and oral exam

Conditions for the final oral and clinical exam:

 The applicant has passed the written final exam for the specialty of ophthalmology.

Exam format:

The oral exam consists of six of specialized subjects as follows:

- 1- Anterior chamber of eyeball (surface diseases and cataracts) and glaucoma.
- 2- The posterior part of the eye.
- 3- Cornea, optics and correction of refraction defects.
- 4- Eye diseases, orbit, cosmetic eye surgery and eye diseases.
- 6. Uveitis, systemic diseases, and eye neuropathology.



- 5- Ophthalmology in children and strabismus.
- 6- Clinical examination consists of three stations for cases of anterior and posterior parts of the eye, strabismus, nerves and other cases.

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