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# The Training Course of the Scientific Council for Orthopaedic Surgery

PRPARED BY

THE SCIENTIFIC COUNCIL OF ORTHOPAEDIC SURGERY

In the name of ALLAH , the most merciful, the most gracious

# The curriculum of Orthopaedic Surgery

Revised and Recognized by

Members of the Scientific Council of Orthopaedic Surgery

**Dr. Nader Shardoub**

**Dr. Mazen Suod**

**Dr. Adulwahab Daadoush**

**Dr. Abdulhakeem Al atrash**□

**Dr. Salem Abdan**□

**Dr. Adulwahab Abo Yahya**

**Dr. Talaat Alatasi**□

**Dr. Abdullah Hanoon**□

**Dr. Bakri Moaz**□

**Dr. Maan Tabbaa**

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[info@sboms.org](mailto:info@sboms.org):Email

[www.sboms.org](http://www.sboms.org):Website



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## Introduction

This program is what we hope to have the ability to apply, yet it is optimistic but practical and not difficult to reach, and in cooperation among universities, scientific institutes, ministries and health insurances, it will be possible to get the best as well as to save effort and expenses for training our students abroad.

This article aims to elaborate educational programs that are lectures, talks, interviews, and clinical lessons may be given to the trainees. Also, to involve the trainees to get the required information throughout questions and answers, mutual discussions, inculcating the spirit of participation and initiative as well as deepening thoughts and improvement ways of thinking to solve the medical obstacles that the specialist may face in medical and surgical sciences. That's to say the logical thinking is the basis education, and insuring that the medical education is for the whole life – does not stop at any limit or age, saying that surgical sciences does not stop because he who stops will be tired of his peers.

What is expected from the surgical specialist is to be a good idol that's he has always to keep the decent of his appearance, and to respect the places where he is as these places are educational hospitals to be respected. The specialist has also to emphasis confidence in the employee's mind in these facilities, and this is very important to be kept by all specialists.

The specialist's abiding before the patient is very essential part of the treatment, that's he has to keep the confidentiality of profession .As being in this facility, he may be informed private information about a patient who sometimes does not tell his /her nearest relatives .So , this chance given to a specialist should be taken correctly by keeping the patient's secrets , otherwise, he will be punished by the hospital administration and by the law.

### Orthopaedic Surgery Training Aims to:

1- To make the trainee gets essential information and necessary skills which he needs to be able to take care of patients, and to become skillful and professional specialist throughout the following:

A- Knowing about basic diseases, and their causes to prevent them from occurring.

B- Training doctors and medical staff.

C- To have the ability to get integrated information about a patient as: date of disease, patient preview, and to be able to deduce unnatural problems a patient may have.

d- To have the ability to detect a disease as a medical problem, and to build a good perception for a scientific plan to deal with a disease.

E- Building an ability and a habit in a specialist to do for a professional developing throughout training and continuing medical education.

2- To provide a mood of specified morals for the medical treatment that insures the importance being a trainee of high and good morals.

3- To provide a mood that encourages self-medical education , and ensure self-confidence to create a type of mood that supports a medical education of long- life education.

4- To provide information for the trainees on the role of medicine and a doctor in society, and creating a principle that: a doctor is who seeks to fight a disease is a private case.

In addition to all these, a trainee should learn how to register and expose information as a medical case, and how to improve his relations with a patient, and how to know about different kinds of patients and about their personalities.

**The trainee has to know about the following targets:**

\*Developing the skills of receiving a patient, talking to him and to his family in an effective and useful way.

\* To register the date of disease taken from the patient and his family.

\*Examining a patient in details in scientific and correct ways. In addition, deducting unnatural cases.

\* To be able to write down all the problems the patient suffers from in an accurate and tidy way.

\* To form what he what he concludes as a medical problem.

- \* To be able to use his professional and medical information when evaluating a patient.
- \* To identify the psychological and social aspects related to the patient's medical problem throughout a form of social and economic state of his /her family.
- \*To form the evaluation which solve each problem one by one.
- \*Finding a fit plan to evaluate a patient, make tests and the necessary investigations, and follow-up the patient's treatment.
- \* Developing education related to morals of medicine.
- \* Seeing and following-up works of the elder supervisors and specialists to be an example in caring and dealing with patients.
- \*Teaching the resident doctor to be sensitive for the expenses on health sectors. He has to have knowledge about preventive medicine.
- \* Understanding the doctor's role personally and professionally in diagnosis patients.

### Aims of Training

#### General Aims

Providing a comprehensive training in orthopaedic surgery in a way the trainee will be skillful surgeon after finishing training. That is he has good information about surgery in all fields of orthopaedic surgery: in diagnosis, differential diagnosis, treatment, surgical skills, and good ability to take care of a patient after the operation. This includes all

kinds of orthopaedic operations enough experience in emergency cases for all other specialties.

### Accurate aims of training

- 1- To enable the trainee doctor to get enough and basic information in surgical, applicable and practical sciences (causes and treatment with ability to convoy developments in surgical sciences).
- 2- To enable the trainee doctor to improve himself to be qualified to bear responsibility as a surgeon especially dealing with patients and the staff he works with.
- 3- To enable the trainee doctor to have the ability of self-follow-up of continuing medical education in the field of applicable surgery, medical research and self-education in a way that he is able to specialize in in fields of accurate surgery.
- 4- To enable the trainee doctor to get clinical information in an effective and useful way which enables him to specialize, and to take the correct decisions during the operation as a surgeon.
- 5- To enable the graduates to get enough surgical skill to achieve his work as a surgeon in an accurate and a safe way.
- 6- To enable the graduates to acquire a correct professional behavior as well as having knowledge in forensic medicine related to his specialty.
- 7- Teaching a surgeon the morals of the profession and the

medical responsibility.

**8**–Contiuing medical education.

**9**–Encouraging using Arabic language in all different fields of medicine.

**10**–To emphasis on the necessity of mastering English language, and memorizing medical idioms in English.

### Terms of accession

The conditions should be available in whom he wants to get a specialization certificate in orthopaedic surgery from Syrian Board of Medical Specialties.

**1**–The resident doctor should have a certificate in medicine or an equivalent one to the Syrian certificate from a recognized university, or from one of the faculties of medicine in foreign countries on condition that the faculty should be recognized in the country where the resident doctor was born, and to be accredited by the scientific council.

**2**–The applicant must be a practicing doctor.

**3**–He must master the Arabic language.

**4**–He must pay the registration fee.

**5**–Each trainee doctor should be applied in the training program filling an application form of two copies: one with the secretary of the council, the second is sent to the office of SBOMS to be archived in the records of the scientific council of orthopaedic surgery.

## Training

Training must be in practical and scientific centers accredited by the scientific council of orthopaedic surgery and by SBOMS. An annual bulletin of accredited centers by scientific council is issued.

### Training period

1- The training period to get a specialization certificate is five years for the resident doctors on orthopaedic surgery.

2- The training includes:

a- The first year:

\*3 months general surgery.

\*3 months emergency and ambulance.

\*3 months anesthesia and resuscitation.

\*3 months vascular surgery.

b- The second year:

\*3 months emergency and ambulance.

\*3 months reconstructive surgery.

\*3 months follow-up patients in suites.

\*3 months practicing on the protocol of the orthopaedic operations.

c- The third year:

\*3 months neural and spinal surgery.

\*Training on clinical approach of orthopaedic patients in out-

patient department.

\*Training on some emergency and trauma orthopaedic operations.

\*Follow-up patients of orthopaedic operations in the suites.

d. Fourth and fifth year:

\*Examining patients in out-patient departments.

\*Training on all qualitative orthopaedic operations.

\*Trauma surgery.

\* Congenital malformations.

\*Arthroscopic surgery.

\* Surgery of tendons and peripheral nerves.

\* Industrial joint surgery.

\* Orthopaedic tumor.

\* Orthopaedic infections management.

**A detailed table of training periods in department, and the period of each training phase:**

3 months vascular surgery	3 months emergency and ambulance	3 months anesthesia and resuscitation	3 months general surgery (operations)	The first year
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3 months Orthopaedic Operations	3 months distribution on department and follow-up patients	3 months reconstructive surgery	3 months ambulance and hot operations	The second year
3 months neurosurgery and spinal surgery The rest are: out- patient department, emergency operations and ambulance, follow- up patients after operations				The third year
Out- patient departments+ orthopaedic operations				The fourth year
Out- patient departments+ orthopaedic operations				The fifth year

## Weekly Training Program

A training center should provide the following activities depending on planned programs of weekly activities at least the followings:

- 1- Bed side rounds.
- 2- Operating room.
- 3- Out-patient department.
- 4- Accidents and emergencies.
- 5- Practical activities as:
  - a- Grand rounds.
  - b- Journal club.
  - c- Morbidity and mortality meetings.
  - d- Surgical pathology meetings.
  - e- Multi-disciplinary team meetings.

On condition that: The number of the trainees should not be more than one for ten beds, this also is for all other specialties.

## Trainee's duties

A trainee has to make sure that all the following information is registered in the patient's file:

- 1- Date of disease and the clinical examination.
- 2- Results of lab- tests, radiology .etc. - - - -.
- 3- To keep the patient's treatment plan before and after the

operation.

4- The surgeon's notes before the operation.

5- Other medical investigations.

6- A patient's approval form on operation.

7- An operation report.

8- Anesthesia report.

9- A Daily- follow- up report.

10- A treatment report.

11- The outcome of the patient's case after departing the hospital.

\* A trainee works in an out-patient department at least once a week to examine and treat patients in orthopaedic department under a trainer supervision.

\* A trainee has to keep good relations with the patients, patients' families, medical board, medical staff, administrative staff and with all who is meant in treating patients.

\* He must keep confidentiality.

\* He has to write down the following in his logbook:

1- Operations (kinds, number, medical report).

2- His attendances of practical sessions.

3- The logbook should be accredited by the trainer and the supervisor.

4- Writing down should be periodic and systematic, and on the

Net.

\*A trainee does his duties under the trainer's supervision who will evaluate these duties.

\* The scientific research: the trainee participates in presenting a research study in his specialty under the supervision of the trainer, and present what may support his research accredited by the supervisor.

\* A trainee oversees the cleanliness and the neatness of his department, and make sure of the safety of the equipment. He must learn ways of controlling acquired infections and sterilization.

\* He is not entitled to take out or transfer the patients to another hospital without consulting the supervisor.

He has to practice reading radiology, lab results and the results of pathological anatomy.

\* He should abide by attendance and the duties of the alternate due to the table made by the scientific council and the head of the residents. He may not leave his department without a permission from the specialist supervisor.

### Supervisors of training centers

– Instructor of the training program (head of the department at the accredited hospital).

#### His features:

1–He is qualified specialist of at least seven –year experience.

2-He is full-timer specialist, works at the hospital as much as he can with the ability doing his job as a surgeon.

### His commitments

1-Periodic and continuous assessment to the trainee by a practical observing.

2- To increase the responsibility of the trainee according to his efficiency and the year of training.

3- Arranging the scientific activities of the trainee and writing them down in his logbook.

4-Creating the mood of science for training by inviting local and foreign activities and competences, and organizing refreshing courses for trainees in different specialties with the assistance of the training committee and the scientific council of orthopaedic surgery.

5- To supervise on the application of the training program by the trainees and follow-up their activities.

6- Proposing deterrent sanctions on those who are not committed to the training program. The sanction may be stopping training on the condition that it is accredited by the training commission in the scientific council after knowing about the background of the subject matter from both the trainee and the trainer,

### The trainer

His features:

- 1-He is qualified specialist who has at least five-year practical, scientific and educational experience.
- 2- He is a full-timer specialist to work at a hospital for training as much as he can with doing his job as a surgeon.

### His commitments

- 1-Regular and continuous evaluation to the trainee by practical
- 2-To ensure the increase of the trainee's responsibility according to his efficiency and the years of training.
- 3- Organizing the practical activities of the trainee and documenting in his logbook.

### Suggested curriculum and sources

#### Suggested curriculum and sources for the initial exam:

#### Basic sciences:

##### Anatomy:

- \* Information in anatomical sciences related surgical operations.
- \*Clinical and descriptive anatomy of the skeletal and the motor system.
- \* Anatomy a, histology and physiology.
- \* Surgical exposure anatomy and its relationship with surgical consultation.

#### Basic texts: clinical anatomy

#### General surgery and resuscitation:

Training the resident doctor in general surgery, emergency care and resuscitation departments aims to get the following necessary information:

- \*Basic science of statistics.
- \*Organs responding to surgery, wounds and injuries.
- \*Wounds and treatment.
- \*Treatment with fluids,(blood and its components).
- \*Fluid and alkaline acid balance in blood and nutrition.
- \*Therapeutic medicine.
- \*Surgical inflammations, antibiotic and sterilization.
- \*Anesthesia and sedation.
- \*Injuries and resuscitation.
- \*Evaluation before and after the operation.
- \*An accurate monitoring to the surgical patient.
- \*Caring after the operation, purity and rehabilitation.
- \*Complications after the operation and treatment.
- \*The basis of conservation of tissues and organs, and organ-transplant.

- \*The basis of oncology and radiotherapy.
- \*Forensic medicine with surgery.
- \*Medical responsibility in surgical practicing.

### Trauma surgery:

- Classifications of fractures, mechanisms and principles of management.
- Injuries of accidents, complications and ways of management.

### BASIC TEXTS:

- McRay
- Miller Review of Orthopaedic
- Campbell's Operative Orthopaedic

### Suggested curriculum and sources for final exam:

- \***Congenital** and developmental disorders.
- \*Metabolic and endocrine disorders
- \* bone tumors.
- \*Bone and joint infections.
- \*Neuromuscular disorders.

- \* Peripheral nerve-injures.
- \*Spine disorders.
- \*Reconstructive procedures of joints.
- \*The hand disorders.
- \*The foot and ankle disorders.
- \*Amputations.
- \*Sports medicine.

#### BASIC TEXTS:

-Miller Review of Orthopaedic

#### Surgeries:

- Surgical Approaches
- Surgical techniques

#### BASIC TEXTS:

- Surgical Exposures
- Campbell's Operative Orthopaedic