

**GENERAL PLAN FOR HIGH
SPECIALITY CERFIFICATE IN
General Surgery
THE UNIVERSITY OF JORDAN**

الوصف التدريبي ومدد التدريب واماكن التدريب في كل سنة

السنة التدريبية الأولى :

1ST YEAR GENERAL SURGERY (A1)

Level I in general teaching will be concentrated on basic sciences and principles of surgery and will include rotations in the emergency room and intensive care unit. Skills in patient care and management are stressed upon with special emphasis on emergency room and ward procedures . Operative skills are limited to performing minor surgical procedures on the skin and subcutaneous tissue and supervised performance of some of the more common operations. Creating interest and participation in scientific and research activities is also important.

*** Morning Case Review " Morning Report " :**

The one staff member of the department meets with the students on call the night before to discuss emergency admission . The student is expected to present the case and put forward a diagnosis and a plan of management . He is expected to defend his diagnosis and rationalize his planned management and to have reviewed relevant literature about the presented case .

*** Bed side patient care " ward rounds " :**

The student makes rounds on the patients assigned to him . During the round , the patient history , physical examination , general assessment, diagnosis and plan of management are discussed by the teaching staff member who is caring for the patient. The students are expected to consult literature before the rounds .

*** Evening case review " evening closing rounds " :**

Students are required to report on problematic cases in the ward, when on call, and to discuss them with the senior graduate student and teaching staff member on call .

*** Surgical case presentation seminar :**

The student is required to present in a meeting at least four surgical cases per seminar for two seminar (total of a presentations / year) . The meeting is attended by all graduate students in the department of general surgery and the discussion is directed by the assigned teaching staff member and is directed to preoperative diagnosis , investigations, applied therapeutic measures and prognosis .

*** Basic principles of surgery seminar :**

The student is required to prepare and presents at least four presentations per semester for a total of eight presentation per year on problem or issues dealing with basic principles of surgery . Topics are assigned by the department and presentations are attended by all graduate students and discussion is directed by the assigned teaching staff member .

*** Introduction to surgical operative skills :**

Students are introduced to the operating room in which live cases are being handled. The student assists the surgeon in carrying out the operation .

2nd year GENERAL SURGERY (B1)

Level I in general teaching will be concentrated on basic sciences and principles of surgery and will include rotations in the emergency room and intensive care unit and may include rotations to some surgical subspecialties (orthopedics, urology, and neurosurgery) . Skills in patient care and management are stressed upon with special emphasis on emergency room and ward procedures . Operative skills are limited to performing minor surgical procedures on the skin and subcutaneous tissue and supervised performance of some of the more common operations. Creating interest and participation in scientific and research activities is also important.

* **Morning Case Review** :

Same as for first year students but the input and proportion of the student is less intensive .

* **Evening case review** :

Same as for first year students .

* **Bed side patient care** :

Same as for first year students, it includes clinical training in surgical subspecialties including at least 2 months rotation into orthopedics , urology , neurosurgery .

* **Surgical subspecialty seminars** :

The student is required to prepare and presents at least four seminars per semester for a total of at least 8 seminars per year on selected topics in the following surgical fields : pediatric surgery , plastic

surgery , orthopedics , urology , neurosurgery, cardio-vascular and thoracic surgery and oncology . Presentation are made to all graduate students and the discussions are guided by the teaching staff member in charge .

*** Basic principles of surgery seminar :**

Student is required to prepare and presents at least six seminars on topics of applies basic sciences as they are related to surgery including surgical anatomy and embryology surgical pathology, microbiology and immunology surgical , physiology, biochemistry, and pharmacology .

Presentation are made to all graduate students, and discussions are directed by the teaching staff member in charge .

*** Surgical operative skills :**

Students are expected to perform minor operations and to assist in medium and major operations .

3rd year
GENERAL SURGERY (A2)

Level II will include rotations in general surgery and some of the subspecialties (such as thoracic, cardiac, pediatric and plastic) with active acquaintance of surgical skills . In addition teaching will concentrate on various aspects of clinical surgery. Involvement in scientific, research and teaching activities and building of a balanced and safe surgeon by taking responsibilities in problem solving and decision making.

*** Morning Case Review :**

Same as for second year students . No credits .

*** Evening case review :**

Same as for second year students . No credits .

*** Bed side patient care :**

Same as for second year students but less input and preparations than first and second year students.

*** Trauma seminars :**

Students are required to prepare and presents at least four seminars on pathophysiology , epidemiology, pathology, clinical diagnosis, and management of the traumatized patient. Presentations are made to all graduate students while discussions are directed by the teaching staff member in-change .

*** Mortality & Morbidity seminars :**

Student is required to review the surgical deaths and complications of surgical patients . To present an analysis of the risk factors that have resulted in the mortality and morbidity in the individual patient. He should outline the preventive measure for the development of such complication and presents a plan of management for the complications as they arise .

*** Surgical operative skills :**

Students are expected to perform minor and medium operations and to assist in major operations.

*** Biostatics :**

Students are taught basic principles of biostatics .

- First semester of third year.

*** Research Methodology :**

Students are expected to principles of scientific methods, design and conduct of research projects in clinical and basic medical disciplines .

- Second semester of third year .

4th year
GENERAL SURGERY (B2)

Level II will include rotations in general surgery and some of the subspecialties (such as thoracic, cardiac, pediatric and plastic) with active acquaintance of surgical skills . In addition teaching will concentrate on various aspects of clinical surgery. Involvement in scientific, research and teaching activities and building of a balanced and safe surgeon by taking responsibilities in problem solving and decision making.

*** Morning Case Review :**

No credits .

*** Evening case review :**

No credits .

*** Bed side patient care :**

As for third year students.

*** Surgical operative skills :**

Students are expected to perform all medium operations and straight forward major operations. He should do at least one hundred such operation in his fourth year .

*** Special topic seminars " Surgical Grand Round " :**

Students are assigned a topic or a certain aspect of a disease process . He reviews the world literature on the topic and presents the current views in a lecture form . He is guided in his search and presentation by a teaching staff member . All students are expected to attend, prepare and share in the discussion that follows the

presentation. The discussion is moderated by a different teaching staff member .

*** Current literature review " Journal Club " :**

Each student is required to present his review of at least six articles published in an indexed Journal in the field of medical sciences . The review should include the student evaluation of the methodology , originality , data analysis and validity of the conclusions. Significance of the results and contribution to the advancement of surgery and his own recommendations for practical applications of the information's gained from the article .

*** Research Project :**

Each student will be assigned a research project as of second semester of the fourth year . Research projects , are designed to train students in clinical research in surgery and allied fields, students are trained on planning and designed a research project, on carrying out the project, collecting and analysis the results and drawing scientific conclusions. The students are taught how to wright the results of their research project in a form of quality report that may lead to a publication in a recognized scientific journal or to publication in master degree thesis.

5th year
GENERAL SURGERY (3)

Level III will be a consolidation phase with active involvement in operative skills (performing major operations), teaching activities and administrative responsibilities.

*** Morning Case Review :**

No credits .

*** Evening case review :**

No credits .

*** Bed side patient care in surgical subspecialty :**

As for fourth year students , but in patient cases involved in this course cover subspecialties of general surgery including : gastro-intestinal surgery, surgical oncology , peripheral vascular surgery , endocrine surgery , Colo-rectal surgery , trauma , transplant surgery , etc.

*** Surgical operative skills :**

The students is required to perform major and complicated operations and to help junior students in performing minor medium and major operations. He should operate as a surgeon on at least 120 patients requiring major operations .

*** Research Project :**

Continuation of fourth year project.

* **Advanced seminar or state of the art lecture :**

The student is required to prepare and present at least six written lectures at an advanced level with references in the branches of general surgery in which the students develop a special interest .

* **Comprehensive Examination in General Surgery :**

To ward the end of last year that is in the first half of the month of September, the student should pass a comprehensive examination in general surgery , the examination included a written, clinical and oral parts. If all possible , external examiners, should participate in the evaluation of the students.

**GENERAL PLAN FOR HIGH SPECIALITY CERTIFICATE IN
GENERAL SURGERY**

1- General conditions : This plan should follow the general terms and conditions of the High Speciality Certificate in medicine and dental medicine.

2- Special conditions : Non.

3- Number of years : 5th years.

4- Training / teaching plan as following

a. Training / teaching aspects

Year	Training /Teaching aspect
1 st Year General Surgery (A1)	<ul style="list-style-type: none"> - Morning case review “ Morning report”. - Bed side patient care “ ward round”. - Evening case review “ Evening closing rounds”. - Surgical case presentation seminar. - Basic principles of surgery seminar . - Introduction to surgical operative skills.
2 nd Year General Surgery (B1)	<ul style="list-style-type: none"> - Morning case review “ Morning report”. - Bed side patient care “ ward round”. - Evening case review “ Evening closing rounds”. - Surgical subspeciality seminar. - Basic principles of surgery seminar . - Surgical operative skills.

<p>3rd Year General Surgery (A2)</p>	<ul style="list-style-type: none"> - Morning case review “ Morning report”. - Bed side patient care “ ward round”. - Evening case review “ Evening closing rounds”. - Trauma seminars. - Mortality & Morbidity seminars. - Surgical operative skills . - Biostatistics. - Research Methodology.
<p>4th Year General Surgery (B2)</p>	<ul style="list-style-type: none"> - Morning case review “ Morning report”. - Bed side patient care “ ward round”. - Evening case review “ Evening closing rounds”. - Surgical operative skills . - Special topic seminars “ Surgical grand round”. - Current literature review “Journal Club”. - Research project (optional).
<p>5th Year General Surgery (3)</p>	<ul style="list-style-type: none"> - Morning case review “ Morning report”. - Bed side patient care “ ward round”. - Evening case review “ Evening closing rounds”. - Surgical operative skills . - Advanced seminar or state of the art lecture. - Comprehensive examination in general surgery - Research project (optional) .