



مركز الاعتماد  
و ضمان الجودة  
ACCREDITATION & QUALITY ASSURANCE CENTER



**The University of Jordan  
Accreditation & Quality Assurance Center**

## **Course Syllabus**

**Course Name:**

**General Surgery -2**

The University of Jordan  
Faculty of Medicine  
The Department of General Surgery

|    |   |  |
|----|---|--|
| 1  | Course title  | General Surgery 2                                    |
| 2  | Course number                                       | 0507603  |
| 3  | Credit hours (theory, practical)                    | 9  |
|    | Contact hours (theory, practical)                   | 8am to 4pm (Sun-Thu)                                 |
| 4  | Prerequisites/corequisites                          | Completed Basic medical Science program successfully |
| 5  | Program title                                       | Doctor of Medicine MD                                |
| 6  | Program code  | 0507601  |
| 7  | Awarding institution                                | The University of Jordan                             |
| 8  | Faculty   | Faculty of Medicine                                  |
| 9  | Department  | General Surgery                                      |
| 10 | Level of course                                     | Bachelor   |
| 11 | Year of study and semester(s)                       | First or Second Semester 6th year                    |
| 12 | Final Qualification                                 | MD degree  |
| 13 | Other department(s) involved in teaching the course | None   |
| 14 | Language of Instruction                             | English  |
| 15 | Date of production/revision                         | November-2018  |

**16. Course Coordinator:**

Office numbers, office hours, phone numbers, and email addresses should be listed.

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**17. Other instructors:**

N Bsoul, A. Mismar, M. Abu Abeeleh, M. Smadi, A. Bani Hani, S. Jabaiti, Bareqa Salah, M. Amarin, S. Daradkeh, M. Qudah, M. S. El Muhtaseb, M. Rashdan, J. Masad, R. Addasi, H. Almomani, R. Al-Taher

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**18. Course Description:**

The medical students at the 6th year level join the department of Surgery for 8 weeks course. The training is based at the main campus (Jordan University Hospital) and three other locations (Ministry of Health hospital, King Hussein Cancer Center, and King Hussein Medical Center). During the two-month period they rotate between different general surgical specialties including acute and elective settings.

The course is composed of bed site teaching at ward rounds and clinics in addition to attending theater sessions. There are case discussion sessions in the morning and seminars at lunch time discussing all aspects of general surgery and its subspecialties. The ward rounds consist of history taking and physical examination in a one to one basis. The students have access to skills laboratory during which they are taught the basics of catheterization, intravenous access and simple suturing.

**19. Course aims and outcomes:**

A- Aims:

The aim of the course is to strengthen the basic general surgical skills and knowledge the student gained at the 4th year level, improve their skills in history taking and physical examination and expose them to the principles of management and treatment of general surgical patients including elective and emergency settings.

### **Rotation**

#### **General objectives**

- This course is designed to provide students with basic and clinical knowledge and skills necessary to deal with common surgical problem.
- Helping students become clinically oriented in approaching surgical emergencies safely and effectively.
- Building trust in students to deal with surgical patients in a professional manner.

#### **Specific objectives**

##### **Cardiovascular and Thoracic Surgery**

This is a two-week rotation applied through the 6th medical year concerning about Cardiovascular and Thoracic Surgery. Students work with house staff and faculty with responsibilities for working up patients, assisting in operations, and postoperative care in the ICU and the wards. The Student should also be able to suggest decisions regarding patient management and adopt favorable attitudes.

1. Present complete and accurate patient information in a case presentation format, including appropriate components and sequence
2. Help in managing situations calling for emergency interventions in cardiovascular and thoracic surgery (e.g. pneumothorax and other chest traumas) and also routine problems.

##### **Pediatric Surgery**

This is a two-week rotation applied through the 6th year medical students concerning about general and specialty-based Pediatric surgery. During this rotation students learn many concepts and diseases of Pediatric surgery.

1. To provide excellence in students teaching.
2. To direct and guide our students to focus on the primary importance of patient care.
3. To teach the students to become proficient in clinical history taking and physical examination.
4. To instruct the students to formulate a differential diagnosis for common clinical presentations.
5. To educate the students about the management of common surgical diseases in Pediatric surgery department.
6. Students should attend OR and see common pediatric surgeries
7. Students participate in patient management

##### **Oncology Surgery**

This is a two-week rotation applied through the 6th medical year. The student will gain a better understanding of the care of a cancer patient, including anti-neoplastic drugs, toxicity management, and supportive care.

1. The ability to communicate with patients and their families, explaining recommendations to them in terms each individual can comprehend.

2. Perform a focused physical exam concentrating on the relevant areas.
3. Arrive at an appropriate differential diagnosis.
4. Present complete and accurate patient information in a case presentation format, including appropriate components and sequence.
5. The ability and willingness to work in a cooperative manner with other healthcare personnel, being sensitive to their roles and abilities, and to be able to give and receive advice in a manner that is consistent with the harmonious operation of a health care team.
6. Understand the management of the cancer patient throughout the entire in-hospital course by being an active and valuable member of our team.

### **Plastic Surgery**

The two-week plastic surgery rotation is an intense clinical experience that introduces students to the basic principles of plastic surgery. Time is spent on the wards, in outpatient clinics, and in the operating room.

1. Be more confident with history and physical exam.
2. Be responsible for the follow up of assigned patients (formulate a case summary and differential diagnosis).
3. Suggest management plans for assigned patients (suggest relevant investigations and suggest treatment).
4. Be more confident with fluid management of burn patient (formulas to calculate the amount, type of fluid, and how to give).
5. Be more comfortable with dealing with patients in clinics.
6. More surgical technique orientation
7. Participate in the teaching process by leading seminars supervised by faculty members.

### **Gastrointestinal Surgery**

This is rotation of GI surgery for 6th year medical student that expose the students to general and specialty-based GI surgery. During this rotation students learn many concepts of common GI disease

1. To provide excellence in students teaching.
2. To direct and guide our students to focus on the prime importance of patient care.
3. To teach the students to become proficient in clinical history taking and physical examination.
4. To instruct the student to formulate a differential diagnosis for common clinical presentations.
5. To inform the students the indications for and interpretation of basic laboratory, radiological and other investigations.
6. To educate the students about the management of common surgical disease
7. Students should attend OR and see common surgeries
8. Attend afternoon clinics
9. Students participate in patient management
10. Student had nightshift during rotation that expose to GI surgical condition

### **Endocrine and Head and Neck Surgeries**

The two-week endocrine and head & neck surgery rotation for 6th year medical students is a clinical experience that integrates students as members of the patient-care team, participating in pre- and post-operative evaluation and management, and visiting the operating theaters to observe surgical procedures, and sometimes scrubbing in for assistance.

1. Attending and helping in the endocrine surgery clinic along with the residents.

2. Being responsible for the follow up of assigned patients
3. Participating in the teaching process by leading seminars supervised by faculty members.
4. Demonstrate personal attributes of respect, compassion, honesty, dedication, motivation, perseverance, dependability, tolerance and adaptability with pt., their families and those with whom they work.

### **King Hussein Cancer Center**

This is a two-week rotation in which 6<sup>th</sup> year medical students will be exposed to a wide variety of common and uncommon neoplastic diseases in a specialized cancer center.

With the full day exposure to inpatient rounds and attendance of outpatient clinics, experience and knowledge is progressively built. Improvement in history taking, performing proper physical examination for surgical oncologic diseases, and being familiar with management strategies, is expected at the end of this rotation.

The students also expected to have the ability to identify patients at higher risk to develop malignancy as they become aware of screening programs of common neoplastic diseases in Jordan.

### **B- Intended Learning Outcomes (ILOs):**

Upon completion of the course, students shall demonstrate the ability to:

- Perform a focused history and physical on patients with varied surgical diagnoses in the inpatient and outpatient setting.
- Be able to review a chart and present an accurate history and physical to an attending or resident.
- Identify preoperative issues in patients who are candidates for surgery.
- Write accurate clinic and ward notes or history and physicals on patients.
- Be observed by resident or faculty in the evaluation of at least one patient.
- Witness and participate in the process of informed consent for a surgical procedure.
- Evaluate a new patient and independently construct a differential of surgical diagnoses.
- Interpret diagnostic imaging independently and review the films with a radiologist.
  
- **Essential skills:**
  - Tie a two-handed knot
  - Removes sutures and staples
  - Sterile technique and operating room protocol knowledge. View and scrub in multiple operations each week.
  - Recognize proper and improper healing and signs of wound infection.
  - Participate in care of an open wound.
  - Recognize infections which require surgery.
  - Understand the workup of postoperative fever.
  - Write admission orders
  - Urethral catheterization
  - Aid with wound closure in OR.
  
- **Recommended skills:**
  - Nasogastric tube insertion

- Wound drain removal
- Peripheral venous catheterization
- Blood sampling, arterial and venous

## 20. Topic Outline and Schedule:

| 8:30am   |            |           | 12:45pm                                     |            |               |
|--|------------|-----------|---|------------|---------------|
| Case Subject   | Student(s) | Moderator | Case Subject                                | Student(s) | Moderator     |
| OBESITY PATIENT  |            | د رشدان   | Goiter (Multinodular /graves) or ca thyroid |            | اد نادر       |
|  |            |           | ACUTE CHOLECYSTITIS                         |            | اد سلام       |
| Pediatric surgery case (constipation/F.B Aspiration or vomiting) |            | اد هاشم   | CA COLON                                    |            | د محمد القضاة |
| Pneumothorax   |            | د أمجد    | ACUTE PANCREATITIS                          |            | د محمد القضاة |
| Burn   |            | د مرزوق   | Multitrauma case                            |            | اد ابو عبيدة  |
|  |            |           |   |            |               |
| HERNIA (Inguinal or Incisional hernia)                           |            | د سامي    | Diabetic Foot                               |            | اد ايمن       |
|  |            |           | Obstructive Jaundice                        |            | اد سلام       |
| Skin cancer  |            | د سمير    | DVT OR VARICOSE VEINS                       |            | اد معاذ       |
| Liver secondaries (Liver mets)                                   |            | د رامي    | Pediatric surgery case                      |            | د رائد الطاهر |



|   |  |               |  |  |              |
|---|--|---------------|--|--|--------------|
| BLOOD TRANSFUSION CASE                                |  | د بارقة       | ACUTE KIDNEY INJURY                                    |  | د مرزوق      |
|   |  |               |  |  |              |
| Acute Appendicitis /or complicated scenario           |  | د رامي        | Breast CA  |  | اد جمال      |
|   |  |               | Perioperative bleeding                                 |  | اد ايمن      |
| Peripheral vascular disease/Acute lower limb ischemia |  | د أمجد        | Congenital anomalies (cleft lip or palate, hemangioma) |  | د سمير       |
| Pediatric surgery case                                |  | د رائد الطاهر | Acute Diverticulitis                                   |  | د رشدان      |
| INTESTINAL OBSTRUCTION                                |  | د سامي        | Multitrauma case                                       |  | اد ابو عبيدة |

### 21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- Case presentation seminars
- Bed side teaching in the ward rounds and clinic
- Skills laboratory

The Chief/senior resident of each service/team will be responsible for assigning 1-2 patients to each student on the service. Patients will be assigned daily for the subsequent day. Students are expected to pre-round on the assigned patients and be prepared to present those patients assigned during morning rounds.

### 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Student final evaluation will include:

1. Performance on the clinical examination given at the end of the clerkship.
2. Performance on the written examination given at the end of the year.
3. Overall participation in all surgical lectures, surgical rounds, conferences and seminars.

The breakdown of the % for each component in the grading of surgical students will be as follows:

- Evaluations 20% of grade
- Clinical Examination 40% of grade
- Written Examination 40% of grade

#### EVALUATIONS

All students will be required to have evaluations completed, one from each service/team that the student rotates. Each evaluation will be completed as a team evaluation among faculty members.

#### CLINICAL EXAMINATION

- The clinical examination will consist 4 stations of OSCE Examination that cover the major clinicians of General Surgical topics held at the end of the rotation.
- End of year clinical and oral examination.

#### WRITTEN EXAMINATION

The written examination is a MCQs, is given on the end of the year the examination will be allowed 2 hours for completion.

#### Major Evaluation Dates

1. Rotation Evaluation Variable according to student's rotation
2. End of year Final written Exam May each year
3. End of Year Final clinical Exam May to June each year

### 23. Course Policies:

A- Attendance policies: As per university Regulations: Absence should not exceed 15% of rotation days.

B- Absences from exams and handing in assignments on time: As per university Regulations: only legal excuses accepted after review by faculty administration.

C- Health and safety procedures: As per hospital policies and requirements: immunizations, scrubs, etc.

D- Honesty policy regarding cheating, plagiarism, misbehavior: Those captured will be withdrawn from exam and referred to faculty's relevant disciplinary committee.

E- Grading policy: letter system as per university regulations.

F- Available university services that support achievement in the course: Lecture halls with audio-visual facilities, Skills Lab/ Library/ related hospital facilities.

### 24. Required equipment:

1. Skills lab manikins and equipment
2. Full operating theatre scrubs
3. Operating theatre clog/overshoes



**25. References:**

Required book (s), assigned reading and audio-visuals:

Suggested Textbook(s) and Readings

- L.W. Way. Current Surgical Diagnosis and Treatment. Lange.
- D.C. Sabiston. Essentials of Surgery. Saunders.
- Schwartz's Principles of Surgery, 10<sup>th</sup> edition by F. Brunicaudi, Dana Andersen, Timothy Billiar.
- Bailey & Love's Short Practice of Surgery 27th Edition by Norman S. Williams, and P Ronan O'Connell
- Browse's Introduction to the Symptoms & Signs of Surgical Disease, 4<sup>th</sup> edition by Norman L. Browse, John Black, Kevin G. Burnand, and William E. G. Thomas.

**26. Additional information:**

None

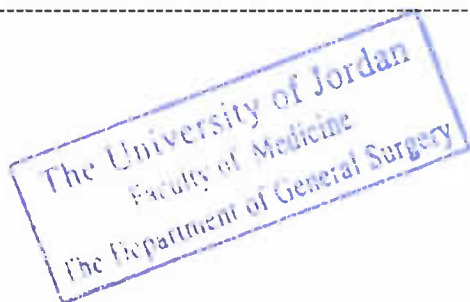
Name of Course Coordinator: Mohammad Rashdan---Signature: ----- Date 2020/1/23

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- Signature: -----



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