Course name: General Surgery 5th year
Course No.: 471-8-5074

Credit points: 8
ECTS:
Academic year: 5th
Semester: 1st and 2nd
Duration: 6 weeks
Location: General Surgery Depts. at Soroka and Barzilai MC
Teaching language: Hebrew
Degree: MD
Course characteristic: primary course in General Surgery
Discipline: General Surgery
Supervising dept.: General Surgery
Requirements: Introduction to Clinical Medicine
Grades key: metric grade for all test components
Lecturer name: Dr. Boris Kirshtein
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Office hours: Dept of Surgery A, Sun-Thu, 8:00-15:00

Course description: basic clinical teaching course in General Surgery using the Problem Oriented Record (POR) system
Course objectives:
Introduce the student to the discipline of Surgery. Understanding that the majority of students do not plan on becoming general surgeons, we desire all students to be exposed to surgical problems that will equip them with skills, knowledge, attitudes, and behaviors necessary for all physicians.

Course Goals:
Clinical thinking comprises a few stages including collecting information about the patient’s condition by history and search of the patient’s medical record, physical exam and relevant tests. While progressing in the course the student will gain tools that will enable him or her to process the information relevant to the patient’s condition, while distinguishing the important information, defining the patient’s problems and bringing to discussion any other problems including relevant differential diagnosis, discussing possible avenues for further diagnosis and developing a treatment program in order to deepen an understanding of the patient’s problems (Problem Oriented Record).

Learning Outcomes:
In completing the course the student will be able to:

1. Process an admission for a Surgical patient using POR
2. Present the patient both verbally and in writing
3. Discuss a problems in general surgery, including differential diagnosis and basic knowledge in trauma, emergency surgery and elective surgical conditions
Attendance regulations: attendance mandatory

Teaching technique:

Frontal lectures before clerkship for whole student class (3days)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Oncological surgery</td>
<td>4</td>
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<tr>
<td>Trauma surgery</td>
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<tr>
<td>Breast surgery</td>
<td>3</td>
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<tr>
<td>Colorectal surgery &amp; proctology</td>
<td>4</td>
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<tr>
<td>Transplantology</td>
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<td>Parathyroid</td>
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<td>Diseases of esophagus &amp; stomach</td>
<td>2h</td>
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<tr>
<td>Abdominal wall hernias</td>
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<td>Bariatric surgery</td>
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<td>Thyroid surgery</td>
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<td>Patient preparation to surgery</td>
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<td>Surgical complications</td>
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<td>Research in surgery</td>
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Bedside teaching is the main component of teaching in rounds and includes:

1. Rounding with medical staff and guided rounds
   - Students will join staff for visits and will learn from a senior physician about the approach to patients’ surgical problems. During the visit students will perform partial physical examination while emphasizing pathological findings. Students will take part in discussions about treatment and diagnostic program for each patient, while working with multi-discipline staff.
   - Guided rounds (Dilemma's) are for students only. The purpose is to have an in-depth discussion about the surgical approach to the evaluation of patients problems. The rounds are done by the dept. staff.
   Usually the rounds are
with patients who were received by the students: the student presents the patient to the other students and the tutor, performs a full physical examination, interprets the results of the patient’s tests, defines the patient’s problems, discuss the differential diagnosis and suggests a program for diagnosis and treatment. Discuss possible complications and surgical techniques.

2. receiving patients for learning purpose in the floor and emergency room – includes taking a history, collecting data from the patient’s file, full physical examination, interpreting relevant tests. These admissions form the basis of learning clinical reasoning along with learning the different medical problems a student should be familiar with. The admissions are reviewed by the dept. doctors and are checked by a senior doctor/ head of the dept.

**Frontal teaching** – short seminars (1 hour) about approach to patients with the most common problems in surgery – while emphasizing the clinical aspect of the diseases: symptoms, physical findings, differential diagnosis etc (see a list of subjects).

**Teaching in OR**

-Prepare for cases in the operating room by reviewing the appropriate anatomy and evaluating the patient in the pre-operative period. Explain the indications for the procedure discuss the risks and expected outcomes of the operation, and identify important anatomical landmarks intraoperatively.
- Participate in the operating room, by demonstrating correct sterile technique, assisting in surgical cases and performing procedures such as suturing and knot tying under the observation of the resident and attending.

**Course tasks:** attendance mandatory

1. Performing 2 admissions a week
2. Accompanying the patient to tests diagnostic (endoscopy, ERCP, CT guided drainage, cholecystostomy, PTC) and surgical procedures.
3. Presentation admitted patients during morning report
4. Patient presentation on gastroenterology meeting
5. Actions the student should perform during the round:
   - Taking blood tests
   - Inserting IVs
   - Taking vital signs: blood pressure and pulse manually, number of breaths per minute
   - Taking urine samples and examine them
6. 4 on call duties until 24.00(one of them weekend)
7. At third week of the course students will perform presentation a patient admission
8. At 6th week short examination on patient presentation, examination and surgical evaluation and management

Each student will have a booklet of his own activities (פנקס מאומנויות) in which he will write his participation on duties, patient admissions, surgeries, meeting presentations with a patient sticks and tutor or senior surgeon signature.
Course Structure: Daily Activity:

7.30-8.00 Morning meetings
8.00-14.00 Participation in Surgery (OR)
8.00-11.00 Morning round (guided or working)
8.00-15.00 Emergency Room
10.00-12.00 – Dilemmas /seminars – 2-3 times a week
10.00-12.00 – Outpatient clinics (Breast, General Surgery, Proctology) - 2-3 times a week

Main Subjects:

- **Emergency surgery**
  - Acute appendicitis
  - Acute abdomen
  - Perforated viscus
  - Upper and lower GI bleeding
  - Small and large bowel obstruction
  - Acute cholecystitis
  - Incarcerated hernia

- **Trauma**
- **Hepatopancreatobiliary surgery**
- **Upper GI surgery**
- **Bariatric surgery**
- **Oncological surgery**
- **Colorectal surgery and proctology**
- **Transplantation**
- **Laparoscopic surgery**
- **Breast surgery**
- **Hernias of abdominal wall**
- **Endocrine surgery**

**Required time for self study:** approx. 3 hours a day for completing tasks and reading relevant material

**Student Evaluation:**

Evaluation according to:
1. Dept. evaluation – the dept. where the student worked will evaluate the student’s clinical abilities and
knowledge during the round: 50% of evaluation score
2. Verbal test in which the student will have to “receive” a patient and present him to attending and diagnose and manage the case. Physical examination skills will also be tested: 25% of evaluation score
3. Final written test (50%) of final grade
   - Departmental evaluation verbal test (50%) and evaluation of his activity during the clerkship (50%)

Reading List:
Mandatory reading
Sabiston Textbook of Surgery
ATLS