

ADVANCED SURGICAL SKILLS

Compulsory elective subject for third to fifth-year students of the Faculty of Medicine.

Teacher in charge of the course: Prof. habil. Mihály Boros, M.D., Ph.D., D.Sc., Head of Department.

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Course code: AOK-KA1461 (lecture), AOK-KA1462 (practice)

Course credit: 2

Course hours per week: 2 (lecture) + 2 (practice)

Prerequisite of registration: Completion of the of Basic Surgical Skills (or Surgical Techniques). The subject should be taken up and accomplished in the 3th-5th semesters.

The aim of the subject: teaching basic surgical techniques, invasive interventions and advanced surgical knowledge to medical students interested in different surgical specialties.

Acquired competence: By applying principles of asepsis, the student is autonomously able to perform minor surgical interventions, bowel and vessel anastomoses, tracheostomy and laparotomy, and routinely uses traditional and minimal invasive surgical instruments under simulated sterile operating conditions.

Method: lectures (6 x 120 min) + practices (6 x 120 min)

Topics of the lectures (6 x 120 min):

1. **Minor surgical procedures.** Basics of outpatient surgery, surgical instrumentation, operations, administration.
2. **Incisions, excisions, biopsies, local anesthesia.** Incisions and excisions. Indications. Biopsy techniques, indications. Preparation of patients for the interventions. Basics of local anesthesia (anesthetics, types of anesthesia, complications).
3. **Anastomoses** (bowel, vessel, nerve). Basic types of anastomosis. Indications of anastomoses, risks. Basics of laparoscopic surgery (appendectomy, cholecystectomy).
- 4-5. **Tracheostomy, conicotomy.** Basics of abdominal surgery. Laparotomy. Appendectomy. Tracheostomy and conicotomy, indications, risks.
6. **Fast track surgery.** One-day surgery. Intraoperative endoscopy: Surgical indications, types of surgery. Preparation of patients for surgery. Surgical endoscopy, types of surgery.

Topics of practices (6 x 2 hours):

1. **Scrubbing.** Basic knotting and suturing techniques (2 hours)
2. **Minor Skin Procedures.** Local anesthesia. Ellipse excision of skin. Removal of encapsulated structures (cysts, tumors). Incision of abscesses (2 hours)
3. **Advanced suturing techniques.** Enterotomy. Intestinal and vessel anastomoses. (2 hours)
4. **Minimally invasive surgery** (2 hours)
- 5-6. **Advanced forms of surgical hemostasis** and suturing techniques on a large animal model. Tracheostomy. Laparotomy (4 hours)

Criteria for completing the course:

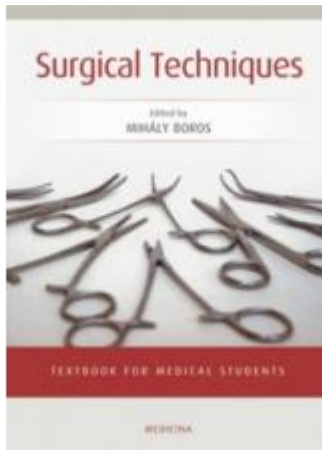
- Attendance of lectures is recommended, attendance of practices: a minimum of 75% is compulsory. Making-up of missed practices is possible only if schedule makes it possible and only after obtaining written permission from the course organizers.
- Acknowledgement of absences from practices and exams are based on medical certificate.
- Requirements for acknowledgement of practices is visiting minimum of 75% of practices.
- Practical exam is on week 14, improvement possibility of practical exam marks is on week 15.

- The prerequisite for the theoretical examination is the completion of a successful practical exam, which can be achieved by successful completion of all three practical exam tasks until the end of the semester.

Evaluation:

- We evaluate the performance of the students on all practices and give a continuous feedback of their progress.
- Written theoretical test (5-grade).

Compulsory textbooks:



Surgical Techniques

Textbook for medical students

Mihály Boros (ed.)

Medicina, Budapest, 2009.



Practical Skills Syllabus

Mihály Boros (ed.)

Innovariant Kft., Szeged, 2008.

Recommended literature: Tutorial video