

**Department of Operative Techniques and Surgical Research
Faculty of Medicine**

Subject: **BASIC SURGICAL TECHNIQUES**
Year, semester: **2024/2025. academic year, 2nd semester, 1-14th week**
Classes-semester: **1st semester: Gr. 7-12.**
Credit points: **3**
Number of lessons
• lecture: **14 hours**
• seminar: **5 hours**
• practice: **23 hours**

1st week (10-14 February)

Lecture: Surgical deontology. Terminology for surgery. Surgical armamentarium..

Seminar: Administration. Cutting, hemostatic, grasping-retracting, special and suturing instruments. Clips and staplers. Order of the instrumental trays and tables.

2nd week (17-21 February)

Lecture: Surgical suture materials. Suturing and knotting techniques.

Seminar: Knotting techniques on different knotting pads. Conventional hand suturing techniques (interrupted, continuous sutures on gauze model). Special knotting and suturing techniques on surgical training model.

3rd week (24-28 February)

Lecture: Surgical hemostasis. Venous cutdown technique. Basics of electrosurgery.

Practice: Ligation of vessels on gauze model. Vein preparation, cannulation on phantom model, preparation of infusion set. Wound closure with different suture techniques on surgical training model.

4th week (3-7 March)

Lecture: Asepsis, antisepsis. Operating room environment. Preparation for operation personnel. Hand and arm disinfection (Scrubbing). Gowning. Gloving. Isolation. Sterilization techniques.

Practice: Scrubbing, gowning and gloving. Wound closure with different suturing techniques on biopreparate model.

5th week (10-14 March)

Lecture: Tracheostomy, conicotomy.

Practice: Conicotomy on phantom model.

Scrubbing. Practising wound closure with different suture techniques on biopreparate model.

6th week (17-21 March)

Lecture: Injection techniques. Blood sampling methods.

Practice: Written test I.

Blood sampling, i.m. and i.v. injections on phantom models.

7th week (24-28 March)

Lecture: Laparotomy.

Practice: Laparotomy on surgical training models.

Scrubbing. Wound closure with different suturing techniques on biopreparate model.

8th week (31 March – 4 April)

Lecture: Basic principles of intestinal surgery.

Practice: Scrubbing. End-to-end one layer intestinal anastomosis on small bowel biopreparate model.

9th week (7-11 April)

Lecture: Surgery of the parenchymal organs.

Practice: Scrubbing. Parenchymal stitches on spleen biopreparate model.

Practising of end-to-end one layer intestinal anastomosis on small bowel biopreparate model.

10th week (14-17 April, 18 April is education-free day)

Lecture: Basic principles of vascular surgery.

Practice: Scrubbing. Vascular suturing techniques on aorta biopreparate model.

11th week (22-25 April, 21 April is education-free day)

Lecture: -

Practice: Blood sampling, i.m. and i.v. injections, vein preparation, cannulation on phantom models.

12th week (28-30 April, 1-2 May are education-free days)

Lecture: Bioplasts and tissue adhesives. Drains, punctures (thoracic, abdominal).

Lecture: Types of wounds. Principles of wound care. Catheters. Basic principles of catheterization.

Seminar: Written test II.

Practice: Catheterization of the urinary bladder on phantom model.

13th week (5-9 May)

Lecture: Insights into the basics of microsurgery, laparoscopic surgery and advanced technology.

Practice: Scrubbing. Practising wound closure with different suturing techniques on biopreparate model.

14th week (12-16 May)

Lecture: Repeat all practices. Preparation for the practical exam.

Practice: Practical exam.

Compulsory reading:

Lecture slides in pdf and supplementary materials (e-learning folder of the course)

Mikó I., Furka I.: Basic Surgical Techniques, Faculty of Medicine. 4th enlarged edition. Debrecen University Press, 2019.

ISBN: 978-963-490-118-1

Recommended readings:

McLatchie G.R., Leaper D.J.: Oxford Handbook of Operative Surgery. Oxford University Press, 1996. ISBN: 0-19-262097-5.

Myint F.: Kirk's Basic Surgical Techniques. 7th edition. Elsevier Health Sciences, 2018. ISBN: 9780702073229.

Requirements

Prerequisite: Anatomy, histology and embryology II, Medical Physiology I

The lectures and seminars/practices are built on each other. Consequently, it is difficult to make-up missed classes. The make-up of the seminars/practices from the 1st to the 4th is obligatory. Compensation for missed seminars should be paid according to the Rules and Regulation of the Faculty of Medicine, University of Debrecen. If the student is absent from more than 2 seminars/practices in a semester (without any acceptable reason), the Department may refuse the signature. Attending the lectures 1-4 and 6 are highly recommended.

There will be two written tests during the semester (6th and 12th weeks).

A list of topics is announced on our webpage: <https://surgres.unideb.hu>

At the end of the semester the student is required to take the end of semester exam (ESE), which consists of a practical and an oral part.