

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

Subject: **BASIC SURGICAL TECHNIQUES**  
Year, semester: **2023/2024. academic year, 2<sup>nd</sup> semester, 1-14<sup>th</sup> week**  
Classes-semester: **2<sup>nd</sup> semester: Gr. 7-12.**  
Credit points: **3**  
Number of lessons  
• lecture: **14 hours**  
• seminar: **5 hours**  
• practice: **23 hours**

1st week (12-16 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 (19-23 February)

Lecture: Surgical sutures. Surgical suture materials.

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 (26 February -1 March)

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 (4-8 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 (11-14 March, 15 March is education-free day)

Lecture: Tracheostomy, conicotomy.

Practice: Conicotomy on phantom model.

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

6th week (18-22 March)

Lecture: Injection techniques. Punction of vessels. Blood sampling methods.

Practice: Written test I. Blood sampling, i.m. and i.v. injections on phantom models.

7th week (25-28 March, 29 March is education-free day)

Lecture 1: Laparotomy.

Lecture 2: Basic principles of intestinal surgery.

Practice: Laparotomy on surgical training models.

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

8th week (2-5 April, 1 April is education-free day)

Lecture: -

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

9th week (8-12 April)

Lecture: Basic principles 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 (15-19 April)

Lecture: Basic principles of vascular surgery.

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

11th week (22-26 April)

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

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

12th week (29 April – 3 May, 1 May is education-free day)

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

Seminar: Written test II. Different types of wound dressings and catheters.

Practice: Catheterization of the urinary bladder on phantom model.

13th week (6-10 May)

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

Practice: Scrubbing. Wound closure with different suturing techniques on bioprepate model.

14th week (13-17 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 1<sup>st</sup> to the 4<sup>th</sup> 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 (6<sup>th</sup> and 12<sup>th</sup> 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.