

**DESCRIPTION OF COURSE UNIT FOR DOCTORAL STUDIES
AT VILNIUS UNIVERSITY**

Scientific Area/eas, Field/ds of Science	Medical and Health Science (M 000): Medicine (M 001)			
Faculty, Institute, Department/Clinic	Faculty of Medicine Institute of Clinical Medicine Clinic of Rheumatology, Orthopaedics Traumatology and Reconstructive Surgery			
Course unit title (ECTS credits, hours)	Chest and Trunk Reconstructive Surgery 9 credits (240 hours)			
Study method	Lectures	Seminars	Consultations	Self-study
Number of ECTS credits	-	-	2	7
Method of the assessment (in 10 point system)	Exam. Oral examination. 3 questions.			
PURPOSE OF THE COURSE UNIT				
To provide deeper knowledge of principles of the reconstructive, functional, and aesthetic trunk and chest surgery, anatomical features of the trunk and chest, types of operations, planning, preoperative assessment, surgical techniques, principles of complications prevention, and rehabilitation.				
THE MAIN TOPICS OF THE COURSE UNIT				
<p>Aesthetic and reconstructive breast surgery. Anatomy, physiology, basic dimensions. Breast changes in different age periods. Pregnancy, lactation. External changes. Congenital deformities (Poland syndrome, tubular deformity, polymyastia, etc.). Non-malignant and malignant tumors, principles of their diagnostic and treatment, multidisciplinary treatment. Augmentation. Implants, their types, and selection criteria. Types of operations. Prevention of complications. Early and late postoperative periods. Rehabilitation. Evaluation of results. Mastoptosis. Types of mastopexy and selection criteria. Indications and contraindications. Tactics and treatment methods of scars after mastopexy. Breast reduction methods, selection criteria. Gynecomastia. Breast formation during gender reassignment. Breast reconstruction due to congenital or acquired defects. Autologous tissues or implants. Microsurgical breast reconstruction. Planning of multi-staged operations, preoperative evaluation, surgical technique. Nipple reconstruction. Nipple plastic.</p> <p>Abdominoplasty. Preoperative evaluation, dimensions. Criteria for selection of surgery.</p> <p>Operating technique. Complications. Criteria for choosing between abdominoplasty and liposuction.</p> <p>Abdominal wall reconstruction. Miniabdominoplasty.</p> <p>Surgical treatment of obesity. Complex treatment with the participation of an endocrinologist and a nutritionist.</p> <p>Body contouring using liposuction. Anatomy of subcutaneous fat, layers. Fat distribution disorders in other diseases. Preoperative evaluation. Types of anesthesia. Liposuction, types, and methodology. Complications (contusion, peripheral nerve damage, irregular contour), their treatment tactics. Autologous fat transplantation.</p> <p>Gender reassignment surgery. Legal, psychological aspects. Multi-staged operations, planning.</p> <p>Autotransplantation is one of the most important methods of reconstructive surgery. Historical aspects of autotransplantation. Transplantology terminology: auto-, alo-,</p>				

xenogeneic transplantation. Tissue autotransplantation (without microsurgery). Skin transplantation. Types of skin grafts, physiology of attachment in the recipient area. Donor area treatment. Methods of skin graft collection. Bone transplantation (osteoplasty). Physiology of bone graft attachment, types: "free" and vascularized. Cartilage transplants, their sources. Areas of application. Autotransplantation of other tissues - mucous membranes, nerves, blood vessels, tendons, fascia. Microsurgical method. Classification of flaps. Flap selection criteria. Clinical situations leading to the choice of microsurgical autotransplantation. Fasciocutaneous flaps: groin, dorsal foot, BIEF, lateral upper arm, deltoid, radial flaps. Osteophasciocutaneous flaps: groin, shoulders. Muscle transplantation: functional, static. Transplants of M.gracilis, M. latissimus dorsi, M. rectus abdominis, M. serratus anterior. Musculocutaneous flaps: thoracodorsal, m.gluteus superior, TRAM, DIEP. Fascias transplantation. Vascularized bone autotransplantation. Sources of transplants. Large fat transplant. Postoperative monitoring of transplant blood flow. Transplant circulatory disorders, their correction.

RECOMMENDED LITERATURE SOURCES

1. Scandinavian Plastic Surgery. Kuokkanen H, Holstrom H, Abyholm FE, Drzewiecki KT Narayana Press 2008.
2. Skandinavijos plastinė ir rekonstrukcinė chirurgija Kuokkanen H, Holstrom H, Abyholm FE, Drzewiecki KT. Vilniaus universiteto leidykla 2016.
3. Grabb and Smith's Plastic Surgery. Kevin C Chung MD, MS 8th edition. Wolters Kluwer. 2019.
4. Breast Reconstruction with Autologous Tissue. H. Fansa, Ch. Heitmann. Springer. 2019.
5. Perforator Flaps Anatomy, Technique, & Clinical Applications. Phillip N. Blondeel, MD, PhD, Steven F. Morris, MD, MSc, Geoffrey G. Hallock, MD. Quality Medical Publishing, Inc. 2013.
6. Nipple-Areolar Complex Reconstruction Principles and Clinical Techniques. Melvin A. Shiffman. Springer. 2018.
7. Grabb's Encyclopedia of Flaps. Strauch B, Vasconez LO, Hall-Findlay EJ, Lee BT. Wolters Kluwer. 2015.
8. Atlas of cosmetic surgery. Kaminer MS, Dover JS, Arndt KA. Philadelphia: W. B. Saunders Company, 2002.
9. Surgery of the Breast: Principles and Art (Two Volume Set). Spear SL, Willey SC, Robb GL, Hammond DC. Lippincott Williams & Wilkins 2010.
10. The Scar Book. A. C. Krakowski, Peter R. Shumaker. Wolters Kluwer. 2017.

CONSULTING LECTURERS

1. Coordinating lecturer: Nerijus Jakutis (Assist. Prof. Dr.).

2. Vytautas Tutkus (Assist. Prof. Dr.).

3. Giedrė Stundžaitė-Baršauskienė (Assoc. Prof. Dr.).

APPROVED:

By Council of Doctoral School of Medicine and Health Sciences at Vilnius University:
29th of September 2022

Chairperson of the Board: Prof. Janina Tutkuvienė