

## ANNOTATION

### work program of the discipline

#### "Topographic anatomy and operative surgery"

Speciality	05/31/01 General medicine
Number of credits	In accordance with the RUP
Interim certification form (test/test with assessment/exam)	pass/pass with grade

#### **1. The purpose of studying the discipline "topographic anatomy and operative surgery"**

consists of anatomical and surgical training of students, necessary for subsequent studies at clinical departments and for independent medical practice.

#### **2. Brief With mastering the discipline "topographic anatomy and operative surgery"**

##### **1. General issues of topographic anatomy and operative surgery**

The subject and objectives of topographic anatomy and operative surgery, the place of the discipline in the system of higher medical education. Basic concepts of topographic anatomy and modern research methods. The doctrine of surgical operations. Classifications of surgical operations. Elementary surgical actions, surgical techniques. Surgical instruments and their classification. Characteristics of suture material. Methods of local anesthesia. General principles of primary surgical treatment of wounds.

##### **2. Topographic anatomy and operative surgery of the limbs**

General characteristics of the areas. Borders, areas, external landmarks, projection of organs and neurovascular formations onto the skin. Topographic-anatomical layers: skin, subcutaneous tissue, superficial fascia, fascia proper, muscles, bones and joints. Neurovascular bundles, regional lymph nodes. Operations on bones, joints, blood vessels, nerves and tendons and for purulent diseases of the extremities. Amputations and disarticulations.

##### **3. Topographic anatomy and operative surgery of the head**

Topographic anatomy of the facial and cerebral parts of the head. Anatomical and physiological basis for surgical interventions on the brain and facial parts of the head, surgical instruments and equipment. Primary surgical treatment of wounds. Methods to stop bleeding in case of damage to soft tissues, calvarial bones, middle artery of the dura mater, venous sinuses, and cerebral vessels. Resection and osteoplastic trephination of the skull, operations for depressed skull fractures in children, plastic surgery of defects in the bones of the cranial vault, trephination of the mastoid process.

##### **4. Topographic anatomy and operative neck surgery**

Topographic anatomy of the neck triangles and intermuscular spaces. Clinical anatomy of the neck organs. Anatomical and physiological rationale for surgical interventions on the neck. Surgical instruments. Cervical vagosympathetic blockade according to A. V. Vishnevsky,

brachial plexus block according to Kulenkampff, puncture and catheterization of the subclavian vein.

Operations on the trachea, thyroid gland, esophagus. Opening of superficial and deep phlegmons of the neck.

### **5. Topographic anatomy and operative breast surgery**

Chest wall. Boundaries, layered structure, projections. The diaphragm, its structure, weak points. The mammary gland: its structure, cellular spaces, blood supply, innervation, regional lymph nodes. Thoracic cavity. Pleural cavities, sinuses, lungs, trachea and bronchi.

Mediastinum, boundaries, division. Clinical anatomy of organs and neurovascular formations. Anatomical and physiological rationale for surgical interventions. Surgical instruments and equipment. Breast surgery for malignant and benign tumors. Incisions for purulent mastitis. Puncture of the pleural cavity. Types of thoracotomies. Surgical interventions for penetrating chest wounds and valvular pneumothorax. The concept of pneumonectomy, lobectomy, segmentectomy. Access to the thoracic esophagus and heart. Pericardial puncture. Seam of the heart. Principles and techniques of operations for heart defects and large vessels, for coronary heart disease.

### **6. Topographic anatomy and operative surgery of the abdomen**

Topographic anatomy and operative surgery of the anterior lateral abdominal wall. External abdominal hernias and their surgical treatment. Topographic anatomy of the floors, bags, sinuses, canals, pockets, ligaments, folds and abdominal organs. Anatomical and physiological basis for surgical interventions on the intestine, stomach, parenchymal organs. Topographic anatomy and operative surgery of the lumbar region and retroperitoneal space.

**7. Topographic anatomy and operative surgery of the pelvis and perineum** Individual, gender and age characteristics of the structure of the walls of the pelvis, pelvic floor and perineum. Floors of the pelvis. Clinical anatomy of the pelvic organs, cellular spaces. Urogenital and anal triangles. Anatomical and physiological rationale for surgical interventions. Surgical instruments and equipment. Intrapelvic blockade according to Shkolnikov-Selivanov. Operations on the bladder, prostate gland, testicle, during ectopic pregnancy, for hemorrhoids, puncture of the rectal uterine cavity.

### **8. Topographic anatomy and operative surgery of the spine**

Spine and spinal canal. Spinal cord, membranes, nerve roots. Skeletotomy of spinal segments. Blood supply, venous outflow. Anatomical and physiological rationale for surgical interventions. Surgical instruments and equipment.