

## Medical Care and Manipulation Techniques (MCMT)

### Thematic plan of practical classes for the Spring semester 2025/2026 for students of the Faculty of Foreign Students

Class Number	Topic, questions
<b>Lesson 1</b> (3h)  <b>09.02.2026-</b> <b>14.02.2026</b>	<b>Topic 2.1 Care for Patients with Hypothermia and Hyperthermia</b> 1. Body Temperature. Rules of Thermometry, Result Evaluation 2. Fever Stages. Observation and Medical Care for Patients with Fever Depending on the Stage. Use of a Hot Water Bottle and Ice Pack 3. Heatstroke, Sunstroke. Medical Care for Patients with Hyperthermia. Physical Cooling Methods 4. Generalized Hypothermia. Medical Care for Patients with Hypothermia
<b>Lesson 2</b> (3h)  <b>16.02.2026-</b> <b>21.02.2026</b>	<b>Topic 2.2 Principles of Therapeutic Nutrition</b> 1. Basic principles of therapeutic nutrition. Dietary regimen. 2. Standard dietary plans / Standard therapeutic diets. 3. Feeding patients with limited self-care ability. 4. Types of enteral nutrition. Parenteral nutrition.
<b>Lesson 3</b> (3h)  <b>23.02.2026-</b> <b>28.03.2026</b>	<b>Topic 2.3 Care for Patients with Circulatory System Disorders</b> 1. Main complaints of patients with circulatory system disorders. 2. Monitoring of pulse, blood pressure, and fluid balance in patients. 3. Pulse characteristics. Blood pressure categories. 4. Electrocardiogram (ECG) recording. 5. Medical care for patients with edema, dyspnea, circulatory failure, pulmonary edema, hypertensive crisis, angina attack, myocardial infarction, and acute vascular insufficiency. 6. Specifics of care for patients with circulatory system disorders, therapeutic nutrition. Laboratory and instrumental diagnostic methods for circulatory system disorders.
<b>Lesson 4</b> (3h)  <b>02.03.2026-</b> <b>07.03.2026</b>	<b>Topic 2.4 Care for Patients with Digestive System Disorders</b> 1. Main complaints of patients with digestive system disorders. 2. Monitoring changes in bowel movements and stool characteristics. 3. Medical care for patients with abdominal pain, heartburn, vomiting, gastrointestinal bleeding, flatulence, constipation, diarrhea. 4. Therapeutic nutrition for digestive system disorders. 5. Laboratory and instrumental diagnostic methods for digestive system disorders.
<b>Lesson 5</b> (3h)  <b>09.13.2026-</b> <b>14.03.2026</b>	<b>Topic 2.5 Gastric Tube Insertion</b> 1. Insertion of an orogastric tube into the stomach: indications, contraindications, potential complications. 2. Equipment and technique for gastric lavage. 3. Insertion of a nasogastric tube into the stomach: indications, contraindications, potential complications. 4. Equipment and technique for tube feeding of a patient.
<b>Lesson 6</b> (3h)  <b>16.03.2026-</b> <b>21.03.2026</b>	<b>Topic 2.6 Enema Administration Technique</b> 1. Indications, contraindications, and potential complications of rectal catheter insertion. 2. Equipment and technique for rectal catheter insertion. 3. Indications, contraindications, and potential complications of various types of enemas. 4. Equipment and technique for administering various types of enemas (cleansing, siphon, and medicated enemas).
<b>Lesson 7</b> (3h)  <b>23.03.2026-</b> <b>28.03.2026</b>	<b>Topic 2.7 Assessment of Practical Skills in the Form of OSCE (Objective Structured Clinical Examination)</b>
<b>Lesson 8</b> (3h)  <b>30.03.2026-</b> <b>04.04.2026</b>	<b>Topic 2.8 Care for Patients with Urinary System Disorders</b> 1. Main complaints of patients with kidney and urinary tract disorders. 2. Monitoring changes in diuresis and urine characteristics. 3. Care for patients with acute urinary retention, urinary incontinence, renal colic, edema. 4. Specifics of care for patients with kidney and urinary tract disorders, therapeutic nutrition. 5. Laboratory and instrumental diagnostic methods for urinary system disorders.
<b>Lesson 9</b> (3h)  <b>06.04.2026-</b> <b>11.04.2026</b>	<b>Topic 2.9 Urinary Catheterization</b> 1. Urinary catheterization: indications, contraindications, potential complications. 2. Equipment and technique for urinary catheterization using a Nelaton catheter. 3. Urine drainage from the bladder. Urine sampling for laboratory analysis using a catheter. 4. Urinary catheterization using a Foley catheter. 5. Use of various types of urine collection bags. 6. Long-term care for an indwelling urinary catheter and collection bag. Administration of medication into the bladder.
<b>Lesson 10</b> (3 ч.)  <b>13.04.2026-</b> <b>18.04.2026</b>	<b>Topic 2.10 Assessment of Practical Skills in the Form of OSCE (Objective Structured Clinical Examination)</b>

<p><b>Lesson 11</b> (3h)</p> <p><b>20.04.2026-</b> <b>25.04.2026</b></p>	<p><b>Topic 2.11 Dressing Room</b></p> <ol style="list-style-type: none"> <li>1. Documentation, equipment, and preparation of the dressing room for performing wound care procedures.</li> <li>2. Purpose and methods of sterilizing reusable medical devices.</li> <li>3. Requirements for dressings and medical instruments. Preparation of dressings.</li> <li>4. Packaging of dressings and other reusable medical devices for sterilization.</li> <li>5. Loading of dressings and other reusable medical devices into the sterilizer.</li> <li>6. Hand hygiene during medical procedures in the dressing room. Rules for glove use in the dressing room.</li> <li>7. Collection and packaging of medical waste in the dressing room.</li> </ol>
<p><b>Lesson 12</b> (3h)</p> <p><b>27.04.2026-</b> <b>02.05.2026</b></p>	<p><b>Topic 2.12 Operating Room Unit. Preoperative Preparation</b></p> <ol style="list-style-type: none"> <li>1. Main and auxiliary rooms of the operating room unit.</li> <li>2. Zones of the operating room unit. Equipment, instruments, and supplies of the operating room unit.</li> <li>3. Sanitary and epidemiological regimen of the operating room unit. Types of cleaning in the operating room unit. Quality control of sterilization for reusable medical devices.</li> <li>4. Transportation of patients to and from the operating room. Specifics of transporting a patient with drains, intravenous infusion systems.</li> <li>5. Methods of surgical hand antisepsis prior to surgery. Self-donning and assisted donning of a sterile gown and gloves.</li> <li>6. The concept of surgery, types of surgery, and main indications for surgery.</li> <li>7. Preoperative patient preparation, its stages. Specifics of preoperative preparation in emergency and elective surgery.</li> <li>8. Psychological preparation of patients. Specifics of preoperative preparation for pregnant patients and elderly/senile patients.</li> <li>9. Preparation of the surgical field. The concept of premedication.</li> </ol>
<p><b>Lesson 13</b> (3h)</p> <p><b>04.05.2026-</b> <b>09.05.2026</b></p>	<p><b>Topic 2.13 Postoperative Patient Care</b></p> <ol style="list-style-type: none"> <li>1. Concept of the postoperative period. Preparation of the ward, bed, and care items for a patient after surgery.</li> <li>2. Monitoring of patients in the first 24 hours after surgery (wound dressing, skin condition, body temperature, cardiovascular system, respiratory system, urinary system).</li> <li>3. Specifics of postoperative management for pregnant patients and elderly/senile patients.</li> <li>4. Organization of nutrition for patients after surgical interventions. Parenteral nutrition regimen and diet.</li> <li>5. Postoperative complications (early and late), their prevention. Assistance in case of vomiting. Use of a rectal catheter. Pain relief. Care for abdominal and pleural drains. Monitoring and recording the amount and nature of drain discharge. Concept of stomas. Care for a tracheostomy. Care for gastrostomy, ileostomy, colostomy, and cystostomy.</li> </ol>
<p><b>Lesson 14</b> (3h)</p> <p><b>11.05.2026-</b> <b>16.05.2026</b></p>	<p><b>Topic 2.14 Care for Patients with Mechanical and Thermal Injuries</b></p> <ol style="list-style-type: none"> <li>1. Monitoring and medical care for patients with various types of wounds. Methodology and technique for performing wound dressing changes (removal of old dressing, wound inspection, wound cleaning, application and fixation of a clean dressing). Care for drains. Removal of drains. Frequency of dressing changes.</li> <li>2. Types of thermal injuries. Medical care for patients with thermal burns.</li> <li>3. Medical care for patients with chemical burns.</li> <li>4. Medical care for patients with electrical injuries.</li> <li>5. Medical care for patients with cold injuries.</li> <li>6. Specifics of sanitary and hygienic regimen in the treatment of patients with thermal injuries.</li> </ol>
<p><b>Lesson 15</b> (3h)</p> <p><b>18.05.2026-</b> <b>23.05.2026</b></p>	<p><b>Topic 2.15 Care for Patients in a Traumatology Department</b></p> <ol style="list-style-type: none"> <li>1. Features of patient positioning in bed with skeletal traction.</li> <li>2. Advantages and disadvantages of plaster casts. Preparation of plaster bandages and splints.</li> <li>3. Types and rules for applying plaster casts.</li> <li>4. Complications from improper application of plaster casts.</li> <li>5. Features of hygienic care for the skin of the body and perineum in bedridden patients. Rules for skin care at the sites of traction pin insertion.</li> </ol>
<p><b>Lesson 16</b> (3h)</p> <p><b>25.05.2026-</b> <b>30.05.2026</b></p>	<p><b>Topic 2.16 Care for Patients in a Purulent (Sepsis) Surgery Department</b></p> <ol style="list-style-type: none"> <li>1. Requirements for the sanitary and hygienic regimen in purulent surgery departments.</li> <li>2. Measures aimed at preventing healthcare-associated infections.</li> <li>3. Procedures for wet cleaning and ultraviolet bactericidal irradiation in the wards of a purulent surgery department.</li> <li>4. Medical care for patients with pressure ulcers.</li> <li>5. Main types of drainage of purulent cavities. Medical care during wound vacuum therapy, continuous aspiration drainage.</li> <li>6. The concept of acute purulent nonspecific infection.</li> </ol>
<p><b>Lesson 17</b> (3h)</p> <p><b>01.06.2026-</b> <b>06.06.2026</b></p>	<p><b>Topic 2.17 Final lesson</b></p>

Deputy Head of the Simulation and Certification  
Center

M.I.Molchanov