ANESTHESIOLOGY – MEDICINE 5th YEAR (2026-27)

SEMINSARS:

The seminsars are designed so that the student processes particular subject area, usually in the form of PowerPoint presentations. The teacher (mentor) evaluates student presentation (grades 1-5). Each absence from seminsars must be additionally passed (colloquium) at the respective teachers. Without it, the student is not allowed to approach the final exam!!

Seminsar topics and mentors:

S1. Fluid Therapy and Venous Access (central, peripheral) (2 hours) – Prof. S. Glumac

S2. Cardiopulmonary Reanimation (2 hours) – Doc. S. Dosenovic

S3. Local Anesthetics (2 hours) – Prof. S. Glumac

S4. Acute Pain. Postoperative Pain (2 hours) – Doc. I. Agnic

S5. Chronic pain. Pain Clinics (2 hours) – N. Delić, Ph.D.

S6. Non-invasive Monitoring of Vital Parameters (2 hours) – J. Krnic, Ph.D.

S7. Emergencies caused by Environmental Factors (2 hours) - B. Ivancev, Ph.D.

S8. Hemodynamics (1 hour). Vasoactive drugs (1 hour) – B. Ivancev, Ph.D., J. Domazet, Ph.D.

S9. Acute Coronary Syndrome (2 hours) – Doc. L. Šarić

S10. Oxygen Therapy. Airway. Tracheotomy. (2 hours) – N. Delic, Ph.D.

DETAILED SCHEDULE WITH PARTICIPATING STUDENTS (yellow color)

S1. Fluid Therapy and Venous Access, (2 hours), November 19th
Mentor: S .Glumac, *sandro.glumac@gmail.com*
a) Intravenous cannulas, catheters (15 mins) 1
b) Venous approach, central/peripheral (15 mins) 2
c) Crystalloids (15 mins) 3
d) Colloids (15 mins) 4
Discussion: 30 mins

S2. Cardiopulmonary reanimation (2 hours) November 20th
Mentor: S. Dosenovic, *sdosenovic@yahoo.com*,
a) BLS 1 – ventilation, compressions, adults vs children (15 mins) 5
b) BLS 2 - AED (15 mins) 6,
c) ALS 1 – Drugs in CPR (15 mins) 7,
d) ALS 2- bradycardia and tachycardia algorhythms, pacemakers, cardioversion (15 mins) 8
e) Causes of cardiac arrest, 4H + 4T, cardiac arrest in special circumstances (15 mins) 9
Discussion: 15 mins

S3. Local Anesthetics (2 hours) November 23th
Mentor: S.Glumac, *sandro.glumac@gmail.com*
a) Mechanism of action of LAs (15 mins) 10
b) Overview and classification of LAs (15 mins) 11
c) Local and systemic complications of local anesthetics (15 mins); 12
d) Treatment of local anesthetic toxicity (15 mins) 13
Discussion: 30 mins

S4. Acute Pain. Postoperative Pain. November 24th
Mentor: I. Agnić, *agnic33@gmail.com*,
a) Opioid analgesics (15 mins) 14
b) Non-opioid analgesics (15 mins) 15,
c) Acute postoperative pain (epidural, nerve blocks, ….) (30 mins) 16
Discussion: 30 mins

S5. Chronic pain (2 hours) November 25th
Mentor: N. Delić, *nkldelic@gmail.com*
a) Chronic Pain Treatment (15 mins), 17
b) Back Pain Treatment (15 mins.) 18,
c) Neuropathic Pain (30 mins.) 19
Discussion: 30 mins

S6. Non-invasive Monitoring of Vital Parameters (2 hours) November 26th
Mentor: J. Krnic, *jkrnic4@gmail.com*
a) monitoring of cardiac function and circulation (15 mins) 1
b) Basic use of ultrasound in monitoring of cardiac function, POCUS (point-of-care ultrasound) (15 mins) 2
c) monitoring of ventilation (oximetry, capnography, gas concentration) (15 mins) 3
d) other monitoring – INVOS, BIS, temperature (15 mins) 4
Discussion: 15 mins

S7. Emergencies caused by Environmental Factors (2 hours) November 27th
Mentor: B. Ivančev, *bozena.ivancev@gmail.com*
a) Drowning, Near-drowning; (15 mins) 5
b) Hypothermia (15 mins) 6
c) Electrical Injuries. Lightning Injuries. (15 mins) 7
d) Envenomations – snakes (15 mins) 8
Discussion: 30 mins

S8.
A. Hemodynamics. (1 hour) December 1st
Mentor: B. Ivančev, bozena.ivancev@gmail.com,
a) Basic physiology – cardiac output, systemic and pulmonary vascular resistance, (15 mins) 9
b) Hemodynamic effects of anesthetics, opioids and relaxants (15 mins) 10
Discussion: 15 mins

B. Vasoactive drugs, (1 hour), December 1st
Mentor: J. Domazet, *josipa.domazet@gmail.com*,
a) Inotrope drugs (10 mins) 11,
b) Vasoconstrictors (15 mins) 12
c) Vasodilators. (15 mins) 13
Discussion: 5 mins

S9. Acute Coronary Syndrome (2 hours) December 2nd
Mentor: L. Šarić, *lenko.saric@gmail.com*
a) Ischemic Heart Disease; Definition, epidemiology, pathogenesis (30 mins) 14
b) ACS – diagnosis, clinical symptoms and signs (15 mins), 15
c) ACS – treatment, MONA algorhythm (15 mins) 16
Discussion 30 mins

S10. Oxygen therapy (2 hours) December 3rd
Mentor: N. Delic, *nkldelic@gmail.com*
a) Oxygen therapy - masks nasal catheters, Venturi masks (15 mins) 17
b) Airway devices (oropharyngeal, supraglottic, endotracheal tubes) (15 mins) 18
c) Percutaneous tracheotomy in the ICU (30 mins) 19
Discussion: 30 mins