

ANESTHESIOLOGY – MEDICINE 5th YEAR (2025-26)

SEMINARS:

The seminars 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 seminars must be additionally passed (colloquium) at the respective teachers. Without it, the student is not allowed to approach the final exam!!

Seminar topics and mentors:

- S1. Fluid Therapy and Venous Access (central, peripheral) (2 hours) – Doc. S. Glumac**
- S2. Cardiopulmonary Reanimation (2 hours) – S. Dosenovic, Ph.D.**
- S3. Local Anesthetics (2 hours) – Doc. S. Glumac**
- S4. Acute Pain. Postoperative Pain (2 hours) – Doc. I. Agnic**
- S5. Chronic pain. Pain Clinics (2 hours) – S. Kraljevic, M.Sc.**
- 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 25th

Mentor: S. Glumac, sandro.glumac@gmail.com

- a) Intravenous cannulas, catheters + Venous approach, central and peripheral (30 min) **(1)**
- b) Crystalloids and colloids (30 min) **2**

Discussion: 30 min

S2. Cardiopulmonary reanimation (2 hours) November 26th

Mentor: S. Dosenovic, sdosenovic@yahoo.com,

- a) BLS 1 – ventilation, compressions, AED (30 min) **3,**
- b) ALS 1 – Drugs in CPR (15 min) **4,**
- c) ALS 2- bradycardia and tachycardia algorithms, pacemakers, cardioversion (25 min) **5**

Discussion: 20 min

S3. Local Anesthetics (2 hours) November 27th

Mentor: S. Glumac, sandro.glumac@gmail.com

- a) Overview and classification of LAs (30 min) **6**
- b) Local and systemic complications of local anesthetics; Treatment of local anesthetic toxicity (30 min) **7**

Discussion: 30 min

S4. Acute Pain. Postoperative Pain. December 1st

Mentor: I. Agnić, agnic33@gmail.com,

- a) Analgesics (opioid and non-opioid analgesics (30 min) **8,**
- b) Postoperative pain (epidural, nerve blocks,) (30 min) **9**

Discussion: 30 min

S5. Chronic pain (2 hours) December 2nd

Mentor: S. Kraljevic, suzyenkraljevic@ymail.com

- a) Chronic Pain Treatment, Back Pain Treatment (30 min.) **10,**
- b) Neuropathic Pain (30 min.) **11**

Discussion: 30 min

S6. Non-invasive Monitoring of Vital Parameters (2 hours) December 3rd

Mentor: J. Krnic, jkrnic4@gmail.com

- a) monitoring of cardiac function and circulation (30 min) **12**
- b) monitoring of ventilation + other monitoring – INVOS, BIS, temperature (30 min) **13**

Discussion: 30 min

S7. Emergencies caused by Environmental Factors (2 hours) December 4th

Mentor: B. Ivančev, bozena.ivancev@gmail.com

a) Drowning, Near-drowning; Hypothermia (30 min) 14

b) Electrical Injuries. Lightning Injuries. Envenomations – snakes (30 min) 15

Discussion: 30 min

S8.

A. Hemodynamics. (1 hour) December 8th

Mentor: B. Ivančev, bozena.ivancev@gmail.com,

a) Basic physiology – cardiac output, systemic and pulmonary vascular resistance, (15 min) 16

b) Hemodynamic effects of anesthetics, opioids and relaxants (15 min) 17

Discussion: 15 min

B. Vasoactive drugs, (1 hour), December 8th

Mentor: J. Domazet, josipa.domazet@gmail.com,

a) Inotrope drugs (15 min) 18,

b) Vasoconstrictors and Vasodilators. (15 min) 19

Discussion: 15 min

S9. Acute Coronary Syndrome (2 hours) December 9th

Mentor: L. Šarić, lenko.saric@gmail.com

a) Ischemic Heart Disease; Definition, epidemiology, pathogenesis (30min) 20

b) ACS – diagnosis, clinical symptoms and signs, treatment (30 min) 21

Discussion 30 min

S10. Oxygen therapy (2 hours) December 10th

Mentor: N. Delic, nkldelic@gmail.com

a) Oxygen therapy - masks nasal catheters, Venturi masks (30 min) + Airway devices (oropharyngeal, supraglottic, endotracheal tubes) 22

b) Percutaneous tracheotomy in the ICU (30 min) 23

Discussion: 30 min