

Elective Description

Course Number: SURG 9114-01

Campus: Southwest (Bismarck) Department: Surgery

Elective/Experience Title: Anesthesiology

Location of Elective: CHI St. Alexius Health-Bismarck, ND

Preceptor(s): Matthew Voigt, MD

Period(s) Offered: All Course Prerequisites: Completion of Surgery Clerkship

Number of students per period: 1 Revised Curriculum Phase(s): 2 & 3

Purpose: To provide education and experience in the care of patients requiring anesthesiology services.

Objectives: Following successful completion of this elective, the <u>student</u> will be able to:

- 1. Evaluate surgical patients in order to stratify operative risks and then to present strategies to decrease the risk for non-emergency procedures.
- 2. Determine conditions that require rapid require rapid sequence intubation.
- 3. Determine the level of depth of the anesthetized patient and recognize physiologic states that alter anesthetic levels.
- 4. Establish central and peripheral vascular access.
- 5. Place non-invasive monitoring devices and interpret basic physiologic data utilizing these monitoring devices.
- 6. Perform direct laryngoscopy for endotracheal intubation.
- 7. Describe strategies to prevent or minimize postoperative nausea, vomiting, pain, delirium, and adverse cardiac events.
- 8. Demonstrate regional anesthetic techniques and discuss potential complications of regional anesthesia.
- 9. Explain indications for epidural, spinal, and combined spinal epidural anesthesia in obstetric and general surgery patients.

Instructional Activities: During this elective, the student will be involved in/experience:

- 1. Performing pre-surgical anesthetic evaluations, including Mallampati and ASA classifications.
- Participating in the management of the intra-operative patient, including focused discussion with attending MD
 regarding how altered physiologic disease states or specific surgical techniques affect the management of the
 anesthetized patient.
- 3. Interpretating monitoring device data transmitted from electrocardiograms, pulmonary and central venous catheters, trans-esophageal echocardiography and pulse oximeters.
- 4. Performing basic regional anesthetic techniques under direct observation.

<u>Criteria for Grading</u>: During and following this elective, the <u>preceptor</u> will:

- 1. Utilize the standardized UNDSMHS senior elective evaluation form.
- 2. Evaluate by direct observation the student's skills in performing complete and accurate examinations of the presurgical patient prior to administering anesthesia.
- 3. Judge by direct observation the student's skills in performing direct laryngoscopy and invasive line placement.
- 4. Evaluate the student's professionalism by direct observation and from feedback received from the surgical staff.
- 5. Evaluate the student's ability to interpret monitoring device data.

Updated: November 2025