UND School of Medicine & Health Sciences
University of North Dakota

# Elective Description

**Campus:** Southeast (Fargo)
**Elective/Experience Title:** Anesthesiology
**Location of Elective:** Sanford Health – Fargo, ND

**Department:** Surgery
**Course Number:** SURG 9212-01

**Preceptor(s):** Jordan Ernst, MD; A. Goswami, MD; Eric Perzhman, MD; Steven Daniels, MD; Patrick J. Indergaard, MD; Robert Raad, MD and; Vijay K. Gaba, MD; Jason Lehr, DO

**Period(s) Offered:** All periods
**Number of students per period:** 1 student

**Course Prerequisites:** Completion of Surgery Clerkship
**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 student 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 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.
2. Participating in the management of the intra-operative patient, including focused discussion with attending MDA regarding how altered physiologic disease states or specific surgical techniques affect the management of the anesthetized patient.
3. Interpret 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.

## Criteria for Grading:

During and following this elective, the preceptor will:

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