



## ANES 600/600s Anesthesiology

### Elective Description

The goal of this elective clerkship is to provide the student with an understanding of the basic management of the perioperative patient and the concurrent medical conditions in the intraoperative period. The student will become familiar with commonly used anesthetic agents and techniques and the risks and complications associated with these. The student will become familiar with principles and skills involved in airway management, intravenous line insertion, and the uses of invasive and non-invasive monitoring.

Credit: 4 semester credits

Prerequisites: SURG 500

*Course Background:* The specifics of anesthesiology and related procedures and pharmacology as they relate to normal physiological conditions are the focus of this elective.

*Course Structure:* Experiences will vary from site to site but may involve three different components in varying amounts: supervised hands-on participation with selected patients, case presentations, and discussions.

### Entrustable Professional Activities

As a fourth-year student, the focus of skills development are those tasks important for entering residency training:

- Gather a history and perform a physical exam
- Prioritize a differential diagnosis following a clinical encounter
- Recommend and interpret common diagnostic and screening tests
- Enter and discuss orders and prescriptions
- Document a clinical encounter in the patient record
- Provide an oral presentation of a clinical encounter
- Form clinical questions and retrieve evidence to advance patient care
- Give or receive a patient handover to transition care responsibility
- Collaborate as a member of an inter-professional team
- Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- Obtain informed consent for tests and/or procedures
- Perform general procedures of a physician
- Identify systems failures and contribute to a culture of safety and improvement

### General Clerkship Objectives

Medical Knowledge

- Review major pain syndromes, the therapeutic modalities available, and the rationale for pharmacologic and interventional treatments

- Identify parts of the anesthetic machine: sources of oxygen, nitrous oxide and volatile agents; safety features; check for breathing circuit for leaks.
- Be able to list the basic monitors used for anesthetics and understand their use in managing patients
- Explain the detailed pharmacology for the following:
  - Various sedative and hypnotic agents
  - Nitrous oxide and other inhalation agents
  - Narcotics: fentanyl, morphine, demerol, codeine, including dosages, methods of administration and major side-effects.
  - Muscle relaxants and neuromuscular junction, paralytic agents
- Detail the changes of pregnancy which affect the airway, respiratory, cardiovascular, and GI systems.
- Review the basics of the autonomic nervous system

#### Patient Care

- Demonstrate an understanding of the implications of pre-existing disease for the patient who is to undergo anesthesia and the process of pre-operative assessment
- Be able to take a pertinent history, including co-existing disease, previous anesthetic problems, medications, allergies, and family history
- Demonstrate an assessment of airway, respiratory and cardiovascular systems
- Explain the rationale for pre-operative fasting and drugs which can be given to reduce the morbidity associated with patients at risk for aspiration.
  - Identify certain conditions that place a patient at high risk for aspiration under general anesthesia.

#### Interpersonal and Communication Skills

- Observe interactions between surgical and non-surgical disciplines with the anesthesiology team

### Sub-Internship

This elective may be taken as a sub-internship after completing ANES 600. The minimal expectations for a sub-internship elective:

- An inpatient rotation that gives the sub-intern primary responsibility for providing care
  - Be developmental, consolidating and refining the knowledge and skills acquired during core clerkships
  - Insure increased responsibility in the evaluation and management of acutely ill, hospitalized patients in directly supervised patient-care settings
  - Promote development of effective inter-professional teamwork and communication
- Skills

The sub-internship must contain rigorous expectations that define:

- Level of supervision
- Duty-hour regulations and clinical workload typical of an intern
- Care transitions and cross-coverage responsibilities
- Access to EHRs
- Opportunities for evidence-based, high value care practice

*Prerequisite:* ANES 600

## **Evaluation**

The evaluation will include the entrustable professional activities. The clerkship preceptor will evaluate those relevant to this clerkship experience.

## **GRADES**

This elective is graded Satisfactory/Unsatisfactory.

## **POLICIES**

### **ACADEMIC DISHONESTY**

The University holds its students to the highest standards of intellectual integrity. Therefore, the attempt of any student to pass any examination by improper means, present work which the student has not performed or aid and abet a student in any dishonest act may result in disciplinary action including immediate dismissal. Any student witnessing or observing a perceived violation of academic dishonesty is required to report it as outlined in the Guidelines. Students failing to report an observed violation may also receive disciplinary action.

### **ATTENDANCE POLICIES**

Attendance of lectures and laboratories is based on the University's stated attendance policy. Refer to the Student handbook for more information.

### **CONDUCT**

The University expects all students to be responsible individuals who possess the highest standards of integrity, honesty and personal conduct. These traits are prerequisites to independent learning, professional development, the successful performance of academic and clinical assignments, and the conduct of one's personal life. Accordingly, students are expected to adhere to a standard of behavior consistent with the University's high standards at all times off and on campus. Compliance with institutional rules and regulations, in addition to city, state and federal laws, is expected.

### **COPYRIGHT POLICY**

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## **Trinity School of Medicine Faculty Contact Information**

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