

ANES 1902 Selective Course

Course: Acute CV Anesthesiology and CV ICU Selective

Course Number: ANES 1902

Department: Anesthesiology & Pain Management

Faculty Coordinator: Amy Woods, M.D. (amy.woods@utsouthwestern.edu)

Faculty Co-coordinator: Daisuke Nonaka, M.D. (daisuke.nonaka@utsouthwestern.edu)

Location: CUH

Length: 4 weeks

Prerequisites (if any): ANES 2101 plus course director approval

Periods offered: 1-12

Number of students: 2

First day Contact: Brian Frasure (brian.frasure@utsouthwestern.edu)

First day time: Varies depending on clinical site assignment. Info to be provided in orientation email.

First day location: Varies depending on clinical site assignment.

- I. Course Description:** The student will learn the basic principles, techniques, and philosophy pertaining to the modern practice of anesthesiology and pain management. Emphasis will be directed towards the understanding of physiologic and pharmacologic mechanisms encountered in the daily practice of anesthesiology. In the classroom, students will learn the basic anesthetic principles, which govern inhalation, IV, and local anesthesia. Extensive instruction and exposure to airway management and intubation techniques will be provided. Students will be instructed in sub-specialty areas of anesthesia, including cardiothoracic, obstetric, pediatric, acute/chronic pain management and neurologic anesthesia.

II. Learning goals/objectives/Assessments:

Goals	Objectives	Assessment methods (examples)
Patient Care: Students will learn about and engage in the pre-operative work-up, intraoperative management, and post-operative planning for patients undergoing general anesthesia for a variety of cases. The student will learn basic airway and IV insertion skills.	<ol style="list-style-type: none">1. The student will be able to list the components necessary for a focused pre-anesthesia history, physical and identifying co-morbid conditions that require special attention in the peri-operative period.2. The student will, with guidance, develop an anesthetic plan for the care of the patient and consider the specific interventions necessary for amnesia,	<i>The student will work on-one-one with an anesthesiology resident or faculty, who will incorporate the student into the care team. The student will receive individualized attention and formative feedback on his/her performance.</i>

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	<p>analgesia, and akinesia during the surgery.</p> <p>3. The student will learn and perform the basic set-up and checks required prior to an anesthetic including but not limited to a machine check, preparation of airway equipment, preparation of IV fluids and drugs, and the presence of other equipment.</p> <p>4. The student will perform basic airway management (bag/mask ventilation and intubation) and peripheral intravenous catheter insertion.</p>	
<p>Medical knowledge: Students will learn about anesthetic pharmacology and its effect on normal physiology. Students will learn about how anesthesiologists manage co-morbidities in the peri-operative period.</p>	<p>1. The student will be able to list common co-morbidities encountered in the anesthetic care of the adult patient and explain common strategies for preparation of surgery.</p> <p>2. The student will be able to list the common classes of drugs used in the anesthetic care and broadly describe how they work and why they are used.</p> <p>3. The student will be able to describe in broad terms ventilation strategies in the peri-operative period.</p> <p>4. The student will be able to describe the anesthetic impact on cardiovascular stability and explain how to mitigate these derangements.</p>	<p><i>The student will have guided discussions with assigned resident and faculty as part of clinical education and will be given formative feedback on fund of knowledge.</i></p>
<p>Interpersonal and Communication skills: The student will observe and engage in inter-professional communication. The student will observe and emulate behaviors conducive to good</p>	<p>1. The student will present a focused history and anesthetic plan to his/her attending and/or chief resident for each case.</p> <p>2. The student will introduce himself/herself to the</p>	<p><i>The student will be given regular feedback in a formative way.</i></p>

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teamwork.	<p>patient and patient's family as part of the patient care team.</p> <p>3. The student will respectfully communicate with the other professionals in the peri-operative areas.</p>	
Professionalism: The student will demonstrate respect for patients and colleagues. The student will be punctual, dress appropriately, and behave responsibly.	<p>1. The student will be punctual and complete all required work.</p> <p>2. The student will demonstrate respect and compassion for all members of the patient care team, the patient, his/her family, and others in the peri-operative environment.</p> <p>3. The student will dress appropriately for the setting (clinical vs OR) and responsibly display his/her badge.</p>	<i>The student will be observed and given feedback in real time as necessary.</i>
Practice Based Learning and Improvement	<p>1. Through formative feedback the student will demonstrate an ability to listen, assimilate feedback, and improve.</p> <p>2. The student will demonstrate an ability to seek evidence-based information for practice in the operating room as questions/issues arise.</p>	<i>The student will engage the team in relevant case/topic discussions and be given feedback in real time.</i>
System based practice	<p>1. The student will respect hospital and operating room rules around hand-washing, syringe labelling, timeout procedures, and introductions</p> <p>2. The student will describe ways in which operating room efficiency can be maintained in the setting of the patient care team.</p>	<i>The student will be observed and given feedback in real time as necessary in her/his interactions with the multidisciplinary team with respect to roles and functions.</i>

III. Methods of Instruction:

1. Didactic: Conferences are scheduled daily on basic anesthetic topics, which are presented by faculty. These conferences are organized in a small group discussion format. The course syllabus

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is a self-directed manual containing questions covering anesthetic topics.

2. Clinical: (schedule, faculty teaching, house staff teaching)
 - a. The students will participate daily in the anesthetic care and management of patients in the cardiac operating rooms and the cardiac intensive care unit at Clements University Hospital. They will spend 2 weeks in each location. They will be under the supervision of the faculty and house staff.
3. Student responsibilities
 - a. Attend grand rounds and the daily academic lectures.
 - b. Daily hands-on instruction in the operating rooms and/or ICUs
 - c. Satisfactory completion of rotational quiz.

IV. Schedule:

- a. OR schedule: Monday through Friday, 0630-1700
- b. ICU schedule: Monday through Friday, 0600-1800, plus one weekend day

V. Course requirements: Participation in daily activities

VI. Methods of evaluation:

- a. Students participate in daily care of patients with resident and faculty supervision.
- b. Students will complete a rotational quiz that will be administered by the faculty.

VII. Recommended reading: Given during rotation