

1901 Selective Course Template

Course: Anesthesiology Sub Internship

Course Number: 1901

Department: Anesthesiology & Pain Management

Faculty Coordinator: Amy Woods, M.D.

Location: Zale, CUH, Parkland, & CMC

Length: 4 weeks

Prerequisites (if any): 2101 and approval subsequent from Course Director

Periods offered: 1-12

Number of students: 4

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

First day time: 8:30 am

First day location: Sprague Building, Anesthesia Office Suite

- I. Course Description:** In depth, comprehensive exposure in the preoperative, intraoperative and postoperative anesthetic management and care of surgical patients. This includes experience in the Ambulatory Surgery Unit, Operating Room, Recovery room, and Intensive Care Units. The student will have increased responsibility in a sub-intern capacity. He/she will be expected to learn the principles of pre-anesthetic evaluation, premedication, choice of agents and techniques, human clinical pharmacology of anesthetics, support of the unconscious patient and the basics of cardiopulmonary resuscitation. The rotation will be structured such that the student spends 2 weeks in the general operating rooms, 1 week in an ICU, and 1 week in the pre-operative clinic or pain service.
- 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, analgesia, and akinesia during the surgery.	<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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	<ol style="list-style-type: none"> 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. 4. The student will perform basic airway management (bag/mask ventilation and intubation) and peripheral intravenous catheter insertion. 	
<p>Medical knowledge: Students will learn about anesthetic pharmacology and its affect on normal physiology. Students will learn about how anesthesiologists manage co-morbidities in the peri-operative period.</p>	<ol style="list-style-type: none"> 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. 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. 3. The student will be able to describe in broad terms ventilation strategies in the peri-operative period. 4. The student will be able to describe the anesthetic impact on cardiovascular stability and explain how to mitigate these derangements. 	<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 teamwork.</p>	<ol style="list-style-type: none"> 1. The student will present a focused history and anesthetic plan to his/her attending and/or chief resident for each case. 2. The student will introduce himself/herself to the patient and patient's family 	<p><i>The student will be given regular feedback in a formative way.</i></p>

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	<p>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>	
<p>Professionalism: The student will demonstrate respect for patients and colleagues. The student will be punctual, dress appropriately, and behave responsibly.</p>	<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>	<p><i>The student will be observed and given feedback in real time as necessary.</i></p>
<p>Practice Based Learning and Improvement</p>	<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>	<p><i>The student will be observed giving a 10 minute oral presentation to her/his cohort and the end of the rotation.</i></p>
<p>System based practice</p>	<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>	<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></p>

III. Methods of Instruction:

1. Didactic: Faculty-guided conferences are given daily. These didactic conferences discuss the preparation of patients with various co-morbidities and the effects of anesthetics in these settings. Conferences will also discuss various aspects and subspecialties of anesthesiology. In addition to medical student lectures, students will be expected to attend weekly Grand Rounds on Wednesday morning at 630 am.

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2. Clinical (Monday-Friday, 2 weekend days of call): Students will work closely with chief residents and faculty anesthesiologists in the capacity of pre-operative assessment and planning, facilitation of the anesthetic plan, and planning for the post-operative period. The students will spend 4 1-week blocks which will include 1 week in an ICU, 1 week in the pre-operative clinic or pain service, and two weeks in the general operating rooms. Students will be responsible for knowledge of the patient's pre-operative/co-morbid status, discussion and development of anesthetic plan, performance of basic airway management procedures and intravenous access insertion, and discussion of post-operative issues.
3. Student responsibilities (and to whom accountable)
 - a. Engagement in the clinical work environment with chief resident and faculty anesthesiologists
 - b. Log of Cases/Encounters/Procedures
 - c. Encounter Cards (minimum of 8)
 - d. Evidence-based, oral presentation at the end of the rotation (case discussion, critical appraisal of journal article, or discussion of topic)

IV. Schedule: Monday through Friday, 630 am to 4 pm

V. Course requirements: Participation in daily activities with preceptor and simulation lab, End of the rotation oral presentation

VI. Methods of evaluation:

1. Real-time formative feedback by chief resident and faculty anesthesiologist and supported by encounter cards
2. Weekly summative evaluation of student's performance
3. Evaluation of oral presentation
4. Grading will be Honors/Pass/Fail

VII. Recommended reading: Given during rotation