

<b><u>Title of Clerkship:</u></b>	<b>Anesthesiology Elective</b>
<b><u>Elective Type:</u></b>	<b>Third Year Elective</b>
<b><u>Department:</u></b>	<b>Anesthesiology</b>
<b><u>Clerkship Site:</u></b>	The University of Toledo Medical Center
<b><u>Course Number:</u></b>	ANES760
<b><u>Blocks available:</u></b>	All -- By permit only
<b><u>Number of students per Faculty:</u></b>	5 – total with ANES 702 block:
<b><u>Faculty:</u></b>	Altenhof, Brent, M.D.; Shashi Bhatt, M.D.; Anthony Braid, M.D.; Andrew Casabianca, M.D.; Ali Hassan, M.D.; James Hofmann, M.D.; Kimberly Jenkins, M.D.; Colleen Lancz, M.D.; Thomas Papadimos, M.D.; Mukesh Pitroda, M.D.; Thomas Rooney, M.D.; Tanaya Sparkle, M.D.

**Elective Description/ Requirements:** This clerkship will offer the student grounding in the medical basis and clinical practice of Anesthesiology. They will participate directly in patient care throughout the process of preoperative evaluation, selection of anesthesia plan, implementation of that plan and emergence and post-op care. Students will also become acquainted with the technical aspects necessary for anesthesia practice including those of intubation, obtaining IV access, monitoring and performance of regional blocks. Participation in, and/or observation of, a requisite number of specific modalities, procedures and patient types is required of all students. The list of requisites can be found on the Department of Anesthesiology website.

**Length of Clerkship:** 4 weeks. Beginning date either 1<sup>st</sup> or 2<sup>nd</sup> week of 5 week block determined at discretion of Department of Anesthesiology.

**Links to Core Educational Course Objectives:** At the end of the clerkship, the student will be able to:  
**Competencies**

- MK8 1. Define what is meant by general anesthesia, regional anesthesia and monitored anesthesia care.
- MK6 2. List the various classes and individual names of pharmacologic agents used in anesthetic practice.
- MK6, MK7 3. Discuss the impact on physiology of the basic inhaled and intravenous anesthetic agents.
- MK7, PC8 4. Describe the steps of a properly conducted general anesthetic.
- MK4, PC8 5. Describe the steps of, and reasoning behind, a rapid sequence general anesthetic induction.
- PC6, PC8 6. Discuss the rationale for and technique of endotracheal intubation during general anesthesia.
- MK6, K7 7. Discuss the aspects of neuromuscular blockade including:
  - a. Mechanism of action of neuromuscular blockers
  - b. Agents used for neuromuscular blockade
  - c. Monitoring
  - d. Reversal
- MK3, MK4, MK6, MK7, IPC1, PC3, PC4, PC8 8. Conduct a proper pre-operative evaluation and utilizing this information to formulate an anesthetic plan.
- MK3, MK4, MK5, MK7, PC7, PC8 9. Discuss proper preoperative evaluation, testing, and preparation of the patient scheduled for elective surgery.
10. Discuss the following in relationship to local anesthetic agents:
  - MK6 a. Different classes of local anesthetics and individual agents
  - PC6 b. Different types of conduction blockade
  - MK6, PC9 c. Complications related to local anesthetic use and over dosage
- MK3, MK6, PC9 11. Discuss the complications that can occur with general and regional anesthesia and their prevention.
- MK2, MK4 12. Describe the physiological changes which occur during pregnancy and relate them to anesthetic management.
- MK2 13. Discuss how the pediatric patient population is different from the adult patient population in regards to physiology, anatomy and the practice of anesthesia.
- MK2, MK7 14. Discuss the following topics as related to fluid management
  - a. Crystalloid vs. colloids
  - b. Calculation of intraoperative fluid needs
  - c. Monitoring of proper hydration
  - d. Rational transfusion and blood replacement therapy
- MK7, IPC1 15. Interpret results of arterial blood gas analysis and recommend proper changes in ventilatory management
- PC6 16. Demonstrate the ability to insert, check and secure an oral endotracheal tube.
- PC6 17. Demonstrate the ability to properly obtain intravenous access.
- PC11, SBP1 18. Discuss the scope of practice and the role in the anesthesia care team of Certified Registered Nurse Anesthetists and Anesthesiologists Assistants.

- MK8 19. Discuss acute pain management in the perioperative setting; including the use of various classes of analgesics and their routes of administration, as well as different types of conduction blockade.

**Professionalism:** UT/COM students will meet or exceed the institutional standards for professionalism as stated in the current Core Competencies and the current Educational Course Objectives for the Sponsoring Department.

**Instructional Methods:**

1. Diagnostic tests use/interpretation
2. Interpretation of lab data
3. Mentored Clinical Practice
4. Mentored Technical Skills Practice

**Evaluation methods employed:**

1. Attendance
2. Clinical Log
3. Professionalism Assessment
4. Examination Written – an internal exam, made up of multiple choice and short answer questions, is offered at the end of the rotation and will account for 1/3 of the grade.
5. Clinical Competency Evaluation – 2/3 of the grade will be based on faculty observation and assessment of clinical skills by the attending anesthesiologists who have worked with the students in the operating room environment. Daily formative feedback evaluations will be tendered by the faculty/residents with whom the students work.
6. Written Paper/Project – Completion of a scholarly project is required of those students who wish to be considered for the grade of “Honors.” Completion of the project does not guarantee Honors. More information is available under Clerkship Information on the Department of Anesthesiology website.

**Prerequisites:** Successful completion of 2 blocks of any of the required core courses of Surgery, Medicine, Family Medicine, Peds., or Ob/Gyn. Instructor Approval.

**Clerkship Director:** James P. Hofmann, M.D.

**Clerkship Coordinator:** Patti Ellis-Finch

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**Special Requirements:** No night call.

**AAMC Hot Topics**

**Addressed in this** Elective

**Clerkship:**