# Edward Via College of Osteopathic Medicine VIRCINIA - CAROLINAS

## Edward Via College of Osteopathic Medicine

4<sup>th</sup> Year Clinical Rotation: Anesthesiology MED 8300: Surgical Selective Clinical Rotation I MED 8301: Surgical Selective Clinical Rotation I MED 8310: Surgical Selective Clinical Rotation II MED 8311: Surgical Selective Clinical Rotation II

### COURSE SYLLABUS

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#### I. Rotation Description

Students will shadow anesthesiologists and/or certified registered nurse anesthetists as these individuals perform their daily functions. Students will participate in patient care based on their level of competency and at the discretion of their anesthesiology attending.

#### II. Rotation Goals

Exposure to and clinical awareness of issues in preoperative assessment, principles and techniques of general and regional anesthesia, airway manipulation and intubation, monitoring techniques, drugs commonly used in anesthesia, and acute postoperative management. Student will assist in the direct management of patients undergoing perioperative care.

- a. Demonstrate a basic familiarity with the field of anesthesiology
- b. Demonstrate increased comfort with airway manipulation including bag-mask-valve ventilation and intubation
- c. Demonstrate basic familiarity with drugs commonly used in anesthesia
- d. At the end of a four week rotation, you should be able to:
- e. Demonstrate competency in history taking and physical examination skills in the preoperative patient.
- f. Demonstrate knowledge of operating room safety.

MED 8300: Surgical Selective Clinical Rotation I: Anesthesiology MED 8301: Surgical Selective Clinical Rotation I: Anesthesiology MED 8310: Surgical Selective Clinical Rotation II: Anesthesiology MED 8311: Surgical Selective Clinical Rotation II: Anesthesiology

- g. Demonstrate familiarity with continuous monitoring and care of a patient undergoing surgical procedures
- h. Demonstrate airway management competency including assessment of airway difficulty and the use of bagvalve mask, oral and nasal airways, laryngeal mask airways, tracheal intubation, and rapid sequence intubation.
- i. Demonstrate knowledge of procedural sedation administration and care.
- j. Demonstrate knowledge in the use of difficult airway devices such as intubating laryngoscopes, glidescope, Eschmann bougie, and transcricoid jet ventilation.
- k. Demonstrate knowledge of invasive modalities including peripheral IV insertion, PICC line placement, arterial catheter insertion, central venous access, and orogastric/nasogastric tube placement.
- l. Demonstrate basic knowledge of regional anesthesia modalities
- m. Demonstrate an understanding of the principles of post anesthesia recovery care and participate in the conduct of that care including recognition of the common complications seen following anesthetic care.
- n. Demonstrate knowledge of the pharmacology of major anesthetic agents including their appropriate selection and use.
- o. Demonstrate knowledge of the basic physiology and interpretation of intraoperative monitoring including end-tidal CO2, non-invasive BP, oxygen saturation, and other hemodynamic measurements.
- p. Demonstrate knowledge of basic anesthesia mechanical ventilator management.

#### III. Rotation Design

The majority of the Anesthesiology rotation occurs in the hospital setting in the operating room.

#### IV. Credits

4 week course = 4 credit hours (MED 8300 or MED 8310) 2 week course=2 credit hours (MED 8301 or MED 8311)

#### V. Suggested Textbook and References

Medical Student should check with coordinator of actual rotation for any additional specific text requirements.

- a. Allain, Rae M. (ed.), Alston, Theodore A. (ed.), et al. Clinical Anesthesia Procedures of the Massachussetts General Hospital: Department of Anesthesia and Critical Care, 8th Ed., 2010, Lippincott, Williams and Wilkins.
- b. Miller, Ronald D. and Pardo, Manual, Basics of Anesthesia, 6th Ed, 2011, Saunders.
- c. Morgan G., et al. Clinical Anesthesiology, 4th Ed, 2005, McGraw-Hill. (Newer addition is due out in June 2013)
- d. Urman, Richard D. et al. Pocket Anesthesia, 2nd Ed, 2012, Lippincott, Williams and Wilkins.

#### VI. Course Grading/Requirements for Successful Completion of the Anesthesiology Rotation

- a. Attendance according to VCOM and preceptor requirements
- **b.** Preceptor Evaluation at end-of-rotation

Grading policies, academic progress, and graduation requirements may be found in the *College Catalog and Student Handbook* at: <u>http://www.vcom.vt.edu/catalog/</u>.

#### VII. Clinical Performance Objectives

The end-of-rotation evaluation for this rotation will be completed by your preceptor and is based on clinical core competencies. These core competencies reflect student performance in 6 key areas: communication, problem solving, clinical skills, medical knowledge, osteopathic medicine and professional and ethical considerations. Your end-of-rotation evaluation from your preceptor will be based directly on your performance in these 6 core competencies as described below.

- a. Communication the student should demonstrate the following clinical communication skills:
  - 1. Effective listening to patient, family, peers, and healthcare team
  - 2. Demonstrates compassion and respect in patient communications
  - 3. Effective investigation of chief complaint, medical and psychosocial history specific to the rotation
  - 4. Considers whole patient: social, spiritual & cultural concerns
  - 5. Efficiently prioritizes essential from non-essential information
  - 6. Assures patient understands instructions, consents & medications
  - 7. Presents cases in an accurate, concise, well organized manner
- b. Problem Solving the student should demonstrate the following problem solving skills:
  - 1. Identify important questions and separate data in organized fashion organizing positives & negatives
  - 2. Discern major from minor patient problems
  - 3. Formulate a differential while identifying the most common diagnoses
  - 4. Identify indications for & apply findings from the most common radiographic and diagnostic tests
  - 5. Identify correct management plan considering contraindications & interactions
- c. Clinical Skills the student should demonstrate the following problem solving skills:
  - 1. Assesses vital signs & triage patient according to degree of illness
  - 2. Perform good auscultory, palpatory & visual skills
  - 3. Perform a thorough physical exam pertinent to the rotation
- d. Osteopathic Manipulative Medicine the student should demonstrate the following skills in regards to osteopathic manipulative medicine:
  - 1. Apply osteopathic manipulative medicine successfully when appropriate
  - 2. Perform and document a thorough musculoskeletal exam
  - 3. Utilize palpatory skills to accurately discern physical changes that occur with various clinical disorders
  - 4. Apply osteopathic manipulative treatments successfully
- e. Medical Knowledge the student should demonstrate the following in regards to medical knowledge:
  - 1. Identify & correlate anatomy, pathology and pathophysiology related to most disease processes
  - 2. Demonstrate characteristics of a self-motivated learner including demonstrating interest and enthusiasm about patient cases and research of the literature
  - 3. Are thorough & knowledgeable in researching evidence based literature
  - 4. Actively seek feedback from preceptor on areas for improvement
  - 5. Correlate symptoms & signs with most common diseases
- f. Professional and Ethical Behaviors the student should demonstrate the following professional and ethical behaviors and skills:

- 1. Is dutiful, arrives on time & stays until all tasks are complete
- 2. Consistently follows through on patient care responsibilities
- 3. Accepts & readily responds to feedback, is not resistant to advice
- 4. Assures professionalism in relationships with patients, staff, & peers
- 5. Displays integrity & honesty in medical ability and documentation
- 6. Acknowledges errors, seeks to correct errors appropriately
- 7. Is well prepared for and seeks to provide high quality patient care
- 8. Identifies the importance to care for underserved populations in a non-judgmental & altruistic manner
- g. Osteopathic Manipulative Medicine Components
  Students must be familiar with the OMM didactic and workshop requirements for their OMS-4 year as described in the Osteopathic Manipulative Medicine website.