

## Edward Via College of Osteopathic Medicine

4<sup>th</sup> Year Clinical Rotation: Surgical Critical Care

MED 8305: Surgical Selective Clinical Rotation

### **COURSE SYLLABUS**

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#### I. Rotation Description

Students will gain hands-on experience in the diagnosis and management of critically injured and acutely ill general surgery, neurosurgery, and trauma patients. Students function as an integral part of the surgical critical care team. The team is responsible for all aspects of critical care including bedside procedures, ventilatory and post-surgical management. Students will present patients on daily ward rounds and take call.

#### II. Rotation Goals

The goal of this rotation is to acquire the knowledge and skills necessary to manage patients with problems unique to the surgical intensive care setting. Additionally, students will appreciate the differences in management strategies between the surgical and medical intensive care units. Bedside teaching and procedure training will occur as part of the daily workrounds.

- a. Basic knowledge that is needed for the resuscitation, diagnosis and treatment of Surgical Critical Care, including General Surgery, Trauma, and Neurosurgery patients
- b. Instruction in the basic clinical skills needed to treat Surgical Critical Care, including General Surgery, Trauma, and Neurosurgery patients
- c. An understanding of the continuum of care involved in the treatment of trauma patients from the resuscitation bay through discharge from the ICU.
- d. To learn how to evaluate and manage patients with different forms of critical illness including respiratory failure, hypotension, sepsis, organ failure and gastrointestinal hemorrhage
- e. To learn how to initiate and manage invasive and non-invasive modes of mechanical ventilation
- f. To learn how to interpret and apply the results of arterial blood gas analysis
- g. To learn how to protect patients from complications associated with stays in the intensive care unit h.

To learn about the application of palliative care medicine principles in the intensive care unit setting i.

To learn to work as part of a multidisciplinary team

- j. Evaluate and manage patients with sepsis and severe life-threatening infections
- k. Evaluate and manage patients with severe organ failure including renal, hepatic and coagulation failure
- 1. Evaluate and manage patients with severe hypotension
- m. Evaluate and manage patients with severe metabolic and endocrinologic disturbances

MED 8300: Surgical Selective Clinical Rotation I: Surgical Critical Care MED 8310: Surgical Selective Clinical Rotation II: Surgical Critical Care

- n. Initiate appropriate empiric antibiotic coverage for patients with severe infections
- o. Initiate and titrate vaso-active medications
- p. Initiate, manage and discontinue both invasive and non-invasive modes of mechanical ventilation

#### III. Rotation Design

The majority of the Surgical Critical Care rotation occurs in the hospital setting in the Surgical ICU, Neuro ICU, Emergency Department and operating room when appropriate.

#### IV. Credits

Four week course= 4 credit hours

#### V. Suggested Textbook and References

- a. The ICU Book, Paul Marino, 3rd ed.
- b. Advanced Trauma Life Support for Doctors
- c. Fundamental Critical Care Support

# VI. Course Grading/Requirements for Successful Completion of the Trauma Surgery/Surgical Critical Care 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*: http://www.vcom.vt.edu/catalog/.

#### 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 healthcareteam
  - 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.