



Edward Via College of Osteopathic Medicine

4th Year Clinical Rotation: Critical Care Medicine/ICU
MED 8200: Medical Selective Clinical Rotation I

COURSE SYLLABUS

Chair	Contact Information
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I. Rotation Description

Students will expand their knowledge of appropriate management of patients in the ICU setting with the importance of consultation. Students will learn to determine appropriate tests and procedures pertinent to the ICU setting and identify the most common diagnoses that require ICU care. The curriculum is taught through VCOM TV on-line lectures, on-line case modules and presentations, assigned readings, bedside and clinic teaching, journal clubs, grand rounds, and through one-on-one student-preceptor experience in caring for patients in the clinical setting.

II. Rotation Goals

- To acquire the ability to perform a diagnostic work-up of adult patients with acute cardiac diseases and conditions and understand laboratory interpretation of cardiac enzymes.
- To understand acute myocardial infarction, unstable angina, arrhythmias, congestive heart failure – acute and chronic and sudden cardiac death.
- To accurately identify and manage conditions such as acute pulmonary edema, sepsis, shock, acute GI bleed, respiratory distress, drug overdose, ventilation management.
- Interpret tests and develop an understanding of the following procedures, including arterial blood gases, chest x-ray, respiratory parameters, peripheral IV insertion, arterial puncture, ACLS and codes.
- Demonstrate understanding of central line placement, bronchoscopy, intubation and ventilation
- Identify those practices that are useful in the ICU setting and effectively apply osteopathic manipulative medicine skills such as pedal pump, thoracic pump and indirect techniques for the treatment of the chest wall and thoracic spine.

III. Rotation Design

The Critical Care Medicine rotation occurs in the hospital setting as a consulting service or as a hospitalist group.

IV. Credits

4 week course = 4 credit hours

V. Suggested Textbook and References

- a. Principles of Critical Care, 3rd ed – Available on AccessMedicine
 - i. Chapter 20 – The Pathophysiology of the Circulation in Critical Illness
 - ii. Chapter 21 – Shock
 - iii. Chapter 27 – Pulmonary Embolic Disorders: Thrombus, Air and Fat
 - iv. Chapter 31 – The Pathophysiology and Differential Diagnosis of Acute Respiratory Failure
 - v. Chapter 32 – Ventilator Waveforms: Clinical Interpretation
 - vi. Chapter 33 – Noninvasive Ventilation
 - vii. Chapter 35 – Airway Management
 - viii. Chapter 36 – Management of the Ventilated Patient
 - ix. Chapter 38 – Acute Lung Injury and the Acute Respiratory Distress Syndrome
 - x. Chapter 46 – Sepsis with Acute Organ Dysfunction

VI. Course Grading/Requirements for Successful Completion of the Critical Care Medicine 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 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 auscultatory, 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.