



Edward Via College of Osteopathic Medicine

4th Year Clinical Rotation: Orthopedic Spine Surgery

MED 8300: Surgical Selective Clinical Rotation I

MED 8310: Surgical Selective Clinical Rotation II

COURSE SYLLABUS

Chair	Contact Information
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I. Rotation Description

Students will shadow orthopedic surgeons who are actively engaged in the practice of spinal surgery. Students will participate in patient care based on their level of competency and at the discretion of their orthopedic surgeon attending.

II. Rotation Goals

Exposure to and clinical awareness of issues in preoperative assessment, principles and techniques of spinal surgery. Student will assist in the direct management of patients undergoing perioperative care, intra-operative, and post-operative care.

- a. Demonstrate a basic familiarity with the field of surgery, orthopedic surgery and spinal surgery.
- b. Demonstrate basic familiarity with indications for spinal surgical intervention.
- c. At the end of a four week rotation, you should be able to:
 - i. Demonstrate competency in history taking and physical examination skills in the preoperative patient.
 - ii. Demonstrate knowledge of neurology as it relates to level of involvement and motor / sensory supply
 - iii. Demonstrate knowledge of operating room safety.
 - iv. Demonstrate familiarity with continuous monitoring and care of a patient undergoing spinal surgical procedures
 - v. Demonstrate competency in interpreting imaging studies dealing with spinal disorders including plain films, CT scans and MRI scans.
 - vi. Demonstrate knowledge of spinal osseous, neurologic and vascular anatomy.

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- d. Demonstrate knowledge of open and minimally invasive methods of treating vertebral disc disease.
- e. Demonstrate knowledge of open and minimally invasive methods of treating spinal stenosis.
- f. Demonstrate knowledge of postoperative care of spinal surgery patients including rehabilitation.

III. Rotation Design

The majority of the Orthopedic Spine rotation occurs in the hospital setting in the operating room as well as in the surgeon's office / clinic.

IV. Credits

4 week course = 4 credit hours

V. Suggested Textbook and References

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

- a. Canale and Beaty: *Campbell's Operative Orthopedics*, 12th ed., 2012, Mosby.
- b. McCulloch JA, et.al.: *Macnab's Backache*. 4th ed., 2006, Lippincott, Williams and Wilkins
- c. Hoppenfeld S., *Orthopedic Neurology*, 1977, Lippincott, Williams and Wilkins
- d. Bridwall K, et.al., *The Textbook of Spinal Surgery*, 2011, Lippincott, Williams and Wilkins

VI. Course Grading/Requirements for Successful Completion of the Orthopedic Spine Surgery 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.