



Edward Via College of Osteopathic Medicine

4th Year Clinical Rotation: Neurosurgery

MED 8300: Surgical Selective Clinical Rotation I

MED 8310: Surgical Selective Clinical Rotation II

COURSE SYLLABUS

Chair	Contact Information
Michael Breiner, MD Chair of Surgery - VC	Phone: 540-231-0600 Email: mbreiner@vcom.vt.edu
Tom Lindsay, DO Associate Chair of Surgery - CC	Phone: 864-327-9842 Email: tlindsey@carolinas.vcom.edu
Paul Brisson, MD Chair of Surgery - AC	Phone: 334-442-4023 Email: pbrisson@auburn.vcom.edu

I. Rotation Description

Students will spend the vast majority of their time in the operating room. They will participate in the daily operating schedule. They will be expected to evaluate the patients and their radiographs in the pre-op area and then discuss the choice and execution of procedures with attending surgeons and residents involved in the procedure. They can anticipate the development of skills in sterile technique, prepping and draping, operative positioning, opening and closing of surgical wounds, control of bleeding, tying, suturing, drain placement, burr hole placement, pedicle screw insertion, laminectomy, ventricular catheter placement, lumbar catheter placement, craniotomy, bone drilling, and more. They will develop an appreciation for the fragility of the nervous system and will develop skills in the delicate manipulation of such tissues.

II. Rotation Goals

- Gain an appreciation for the breadth of neurological pathology
- Develop skills in a detailed neurological exam
- Gain fundamental skills in the radiological evaluation of the nervous system
- Gain fundamental skills in patient care.
- Learn “survival skills” and time management skills in inpatient medicine.
- Develop skills in communicating with critically ill patients and their families.
- Gain insight into the array of ethical and socioeconomic factors impacting the care of patients with neurological disorders

III. Rotation Design

The majority of the Neurosurgery rotation occurs in the hospital OR with some office consult.

IV. Credits

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4 week course = 4 credit hours

V. Suggested Textbook and References

- a. Essential Neurosurgery; A. Kaye <https://archive.org/details/EssentialNeurosurgery>
- b. Neurosurgery: An Introductory Text; P. McL: Oxford Univ. Press, 1995
- c. Handbook of Neurosurgery; M. Greenberg, 6th ed., Thieme; 2006

VI. Course Grading/Requirements for Successful Completion of the Neurosurgery 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 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.