



# Edward Via College of Osteopathic Medicine

## 4<sup>th</sup> Year Clinical Rotation: Pathology

MED 8400: Elective Clinical  
Rotation I MED 8410: Elective  
Clinical Rotation II MED 8420:  
Elective Clinical Rotation III  
MED 8430: Elective Clinical  
Rotation IV

## COURSE SYLLABUS

Chair	Contact Information
Andy Langley, DO Chair of Internal Medicine - AC	Phone: 334-442-4070 Email: <a href="mailto:dlanglely@auburn.vcom.edu">dlanglely@auburn.vcom.edu</a>
Megan C. Thomas, DO Chair of Internal Medicine - VC	Phone: 540-231-0375 Email: <a href="mailto:mcthomas@vcom.vt.edu">mcthomas@vcom.vt.edu</a>
Teresa Kilgore, DO Chair of Internal Medicine - CC	Phone: 864-327-9817 Email: <a href="mailto:tkilgore@carolinas.vcom.edu">tkilgore@carolinas.vcom.edu</a>

### I. Rotation Description

The Pathology rotation provides students with exposure to commonly encountered cases. Students completing this rotation should develop a broad overview of the field and an understanding of the role of the Pathologist in the provision of patient care. Students should seek to correlate clinical presentations and disease states with pathologic findings and to understand the most common diagnostic testing utilized to assist in the identification of malignant, inflammatory, autoimmune, infectious and other disease states. In addition, students must understand the appropriate use of diagnostic testing and the inherent limitations associated with specific tests. Correlation of findings with osteopathic principles such as viscerosomatic and somatosomatic dysfunction should be explored and understood. This rotation should provide the student further opportunity to develop their skills in systematic medical problem solving and patient management abilities, reinforcing patterns of independent learning and self-evaluation, and improving their skills in communication and documentation.

### II. Rotation Goals

- Summarize the general scope of testing offered by clinical laboratories
- Describe the role of the pathologist as part of the patient care team.
- Discuss the principles, strengths and limitations of representative test methods in common areas of laboratory medicine including
  - The pre-analytic variables that may affect laboratory test results
  - Test limitations that affect the ability to critically select the proper study suited to a particular diagnostic problem.
  - Principles considered in test selection for screening, diagnosis, treatment and monitoring of disease.
  - The benefits and limitations of point-of-care testing
  - The role of informatics in improving healthcare delivery and reducing error
- Identify common macroscopic features of various pathologic conditions of breast, gastrointestinal tract, cervical, endometrial, laryngeal, pulmonary, renal, urinary bladder and testicular neoplasms, as well as various inflammatory and infectious diseases.
- Correlate clinical findings (symptoms, signs, course of disease, treatment) with gross and microscopic alterations in the affected tissue(s).

MED 8420: Elective Clinical Rotation III: Pathology  
MED 8430: Elective Clinical Rotation IV: Pathology

- f. Recognize the microscopic appearance of various types of carcinoma, sarcoma, lymphoma and inflammatory and infectious diseases.
- g. Describe common means by which to properly handle surgical specimens to afford accurate diagnoses.
- h. Discuss the value and limitations of intraoperative consultation by means of frozen section and touch preparations.
- i. Briefly discuss pathologic staging procedures used for evaluating malignancy.
- j. Describe the current and future role of molecular diagnostics in the areas of tumor pathology and medical microbiology
- k. Interpret morphologic findings in terms of etiology, pathogenesis and with respect to clinicopathologic correlations.
- l. Interpret results of the following specific laboratory tests:
  - Gram-stained specimens of sputum, urine and wound drainage
  - Dipstick urinalysis and microscopic examination of urine sediment
  - Wright's-stained peripheral blood smears for RBC, WBC and platelets
  - Occult blood testing of fecal samples
  - Blood bank and serology testing
  - Blood chemistries
- m. Perform an autopsy (site and preceptor dependent) with the attending physician including the following tasks:
  - Review of medical record.
  - Gross dissection.
  - Preparation of tissue for histology, microbiology and other analyses as required.
  - Review of histologic material.
  - Presentation of all pertinent information to the Attending Pathologist for case sign-out.
  - Completion of final autopsy report.

### **III. Rotation Design**

The majority of the Pathology rotation occurs in the hospital setting. The student may be involved with dissecting specimens, reviewing biopsies, reviewing large cases and reading about cases.

### **IV. Credits**

4 week course = 4 credit hours

### **V. Suggested Textbook and References**

- a. Kumar, Abbas, Fausto: Robbins Pathologic Basis of Disease, 8<sup>th</sup>ed.
- b. Mills, Stacey E.: Histology for Pathologists, 3<sup>rd</sup>ed.
- c. Lester, Susan C. : Manual of Surgical Pathology, 2<sup>nd</sup>ed.
- d. Henry, JB (ed), Clinical Diagnosis and Management by Laboratory Methods, Latest Edition, Philadelphia: W.B. Saunders

### **VI. Course Grading/Requirements for Successful Completion of the Pathology 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