COURSE SYLLABUS

I. Rotation Description
Students will learn to elicit a complete and focused respiratory history, perform a complete airway and lung examination, perform a complete osteopathic structural examination of the chest and thoracic spine, perform a complete physical examination as it relates to the pulmonary system including an examination of the skin color, extremities for edema and other related systems. Evaluate and determine medical treatment of pulmonary problems and apply laboratory information and testing to specific pulmonary problems.

II. Rotation Objectives

a. Demonstrate understanding of how to conduct a complete history and pulmonary centered physical examination and describe the diagnostic and initial medical management for the following:
   1. Viral tracheitis
   2. Bronchitis
   3. Pneumonia
      i. Viral
      ii. Legionella
      iii. Community acquired
      iv. Lobar vs. interstitial
      v. Aspiration
   4. Asthma
   5. Gastroesophageal reflux with pulmonary complications
   6. Lung Cancer
   7. Tuberculosis
   8. Congestive heart failure
   9. Empyema

b. Be familiar with the common etiologies, diagnostics and formulation of a management plan to minimize exacerbations for:
1. Asthma
2. Chronic bronchitis
3. Emphysema
4. Alpha 2 antitrypsin deficiency
5. Smoking related complications
6. Occupational pulmonary disease
c. Identify the appropriate use of the following diagnostic exams and their interpretation:
   1. Pulmonary function testing
   2. ABG
   3. Chest x-ray
   4. CT and MRI of the chest
   5. Pleural biopsy
   6. Lung biopsy
   7. Pleuracentesis

III. Rotation Design
The pulmonology rotation occurs in the hospital as a consulting service and in the clinic setting.

IV. Credits
4 week course = 4 credit hours

V. Suggested Textbook and References
Goldman's Cecil Textbook of Medicine, 24th ed. 2012
a. Chapter 83 – Approach to the Patient with Respiratory Disease
b. Chapter 85 – Respiratory Structure and Function: Mechanisms and Testing
c. Chapter 87 – Asthma
d. Chapter 88 – COPD
e. Chapter 92 – Interstitial Lung Disease
f. Chapter 97 – Overview of Pneumonia

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