

**PULMONARY MEDICINE ELECTIVE  
MED 821**

**Course Title, Department, & Number: MED 821**

**Course credit or length: 2-4 WEEKS**

**Course director and contact information:** Dr. Imran Khawaja, [khawaja@marshall.edu](mailto:khawaja@marshall.edu); 304.691.1092

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**Course location:** Cabell Huntington Hospital; St. Mary's Hospital; Veteran's Administration Medical Center, Marshall University Medical Center

**Brief Course Description:** This elective is both an inpatient and outpatient experience. The senior medical student will work directly with different pulmonary attendings and fellows, attend 2-3 half-day clinics per week and attend the sleep clinic. The student will experience consultations on hospitalized patients and be involved in their evaluation, including any necessary pulmonary procedures. It is based at the Marshall University Medical Center, the VA Medical Center, Cabell Huntington Hospital, and St. Mary's Medical Center.

**Institutional Objective**

**Patient Care - Students must demonstrate the ability to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.**

**Course Objectives**

The student will perform history and physical examinations on pulmonary patients.

**Outcome Measures**

The faculty will observe the student performing at least one history and physical examinations on a pulmonary patient.

**Medical Knowledge- Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.**

**Basic Science Course Objective**

The student will be knowledgeable of lung anatomy, blood gas interpretation and pulmonary function testing.

**Outcome Measure**

The student will demonstrate to the faculty basic knowledge and understanding of:

- Lung anatomy by correctly interpreting at least two chest radiographs
- Blood gas interpretation by properly interpreting at least two arterial blood gas results
- Pulmonary function by at least interpretations of the tests.

**Course Objective**

The student will acquire knowledge of preventive care guidelines used in pulmonary medicine.

**Outcome Measure**

The student will demonstrate to the faculty knowledge of preventive care guidelines used in pulmonary medicine.

**Basic Science Course Objective**

The student will demonstrate basic knowledge and pharmacologic management of core pulmonary medicine topics.

### **Outcome Measure**

The student will demonstrate to the faculty basic knowledge and pharmacologic management of at least three of the following core topics in pulmonary medicine, with one topic being randomly selected by faculty:

Chronic cough  
COPD/Asthma  
DVT/Pulmonary embolism  
End of life therapy  
Evaluation of dyspnea  
Hemoptysis  
Interstitial lung disease  
Lung cancer  
Pneumonia  
Pleural disease  
Sleep disordered breathing

### **Institutional Objective**

**Interpersonal and Communication Skills-** *Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.*

### **Course Objective**

Students will demonstrate interpersonal and communication skills that assist in effective information exchange and team with patients, patients' families, and professional associates; and, elicit and provide information using effective listening, non-verbal, explanatory, questioning, and writing skills.

### **Outcome Measure**

Faculty and residents will directly observe the students communicating patient information to assist in the transition of care to and from the on-call teams; communicating patient information to faculty; documenting patient information in the form of history and physical examinations, progress notes, operative notes, and other documentation as assigned; and communicating findings and plans of care with patients and families. The student's performance will also be accessed via the evaluation form.

### **Institutional Objective**

**Professionalism-** *Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.*

### **Course Objective**

The student must behave in an ethical, responsible, reliable and dependable manner.

### **Outcome Measure**

The student will be directly observed by faculty and residents to determine ethical behavior, reliability and level of dependability of the student.

### **Institutional Objective**

**Systems-based Practice** - *Students will be able to recognize and better understand the role of other health care professionals in the overall care of the patient.*

### **Course Objective**

The student will demonstrate ability to search and critique the pulmonary literature.

### **Outcome Measure**

The student will demonstrate the ability to critically evaluate medical information and scientific evidence for use in the care of patients requiring pulmonary medicine subspecialty care.

## **ASSESSMENT METHODS**

### **Mid Point Evaluation**

In accordance with LCME standard ED-30, the Course Director will evaluate student performance at mid-point to review the student's professional, clinical and academic performance up to that point. The formative evaluation must be reviewed with the student and the student will have an opportunity to discuss with the Course Director. The form must be signed by the student and returned to the Course Director. The Course Director shall then forward a copy of the form to the Office of Academic Affairs. The form will NOT however be included in the student's official academic record. For a two week elective, feedback will be provided orally to the student at the conclusion of the first week.

### **Preceptor Evaluation- 100%**

#### **Grading Mode: Honors/Pass/Fail**

The preceptors' evaluation will be based upon, but are not limited to, the following factors:

- Attendance and participation in tutorials
- Conference attendance
- Maturity and Professionalism
- Oral Case Presentation/Patient Workup
- Participation in call
- Participation in Clinic and OR Hours
- The demonstration of basic knowledge of patient care during clinic

### **Evaluation of Course and Faculty Requirement**

Completion of evaluations of Course and Faculty members by students is a required component of this course. Students will be issued an "Incomplete" until the course and faculty evaluations have been submitted.

**MUJCESOM Policies:** All medical students taking this course will comply with School of Medicine policies given at <http://musom.marshall.edu/students/policies>.

Individual policies can be found at the following websites:

Student Infectious Material Exposure:

<http://musom.marshall.edu/ups/postexposure.asp>

MS-IV Attendance:

<https://musom.marshall.edu/students/documents/policies/Yr4attendance.pdf>

Academic Dishonesty Policy:

<https://musom.marshall.edu/students/documents/policies/Standards-of-Professionalism-and-Honor-Code.pdf>

Academic Standards Policy:

<https://musom.marshall.edu/students/documents/Policies/ASC-FINAL-POLICY.pdf>

Policy for Students with Disabilities:

<https://musom.marshall.edu/students/documents/Guidelines.pdf>

University Computing Services' Acceptable Use Policy:

<http://www.marshall.edu/ucs/CS/accptuse.asp>

Affirmative Action Policy:

pp. 16-17

[http://www.marshall.edu/catalog/Graduate/S2008/gr\\_sp08.pdf](http://www.marshall.edu/catalog/Graduate/S2008/gr_sp08.pdf)

Incident Weather Policy:

<https://musom.marshall.edu/students/documents/policies/MUSOM-Incident-Weather-Policy.pdf>

Notification of delays and cancellations of classes are posted on the Medical Education Home Page when Marshall University Main Campus is not in session

<https://musom.marshall.edu/weather>

**Required Reading:**

To be assigned by Course Director